DOCUMENT RESUME

ED 229 842 EA 015 619

AUTHOR	Corbett, H. Dickson; And Others
TITLE	To Each Its Own: School Context and School Change.
INSTITUTION	Research for Better Schools, Inc., Philadelphia, Pa.
SPONS AGENCY	National Inst. of Education (ED), Washington, DC.
PUB DATE	Dec 82
NOTE	225p.; Prepared by the Field Studies Component.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	Case Studies; *Educational Environment; Educational Objectives; Educational Planning; Educational Resources; Elementary Secondary Education; Faculty Mobility; Incentives; Information Utilization; *Institutional Characteristics; *Instructional Innovation; Interprofessional Relationship; Linking Agents; *Program Implementation; Teacher Participation

ABSTRACT

In 8 chapters and 2 appendixes, investigators describe research in 14 elementary and secondary schools--in urban, suburban, and rural areas--on school conditions affecting educational change efforts. Conducted over 3 years, the research focused on classroom-level changes and used interviews, observation, and document review for data collection and comparative case studies for data analysis. Chapter 1 introduces the study and discusses planned change. Chapter 2 presents an overview of the research and profiles the 14 schools. Field agents and school change are reviewed in chapter 3. Chapters 4 and 5 examine the change process, looking at the effects of school conditions first on sequential planning and then on teacher prarticipation. Outcomes of change are covered in the next two chapters, the first analyzing the implementation and the second the continuation of change. The last chapter traces changes in local school conditions through the life of change projects. The researchers found that field agents, planning, participation, implementation, and continuation were affected by eight conditions, including resource and incentive availability, school linkages and goals, faculty tensions and turnover, current school practices and knowledge use, and prior change projects. Appendixes cover research methods and assessment of school conditions. (RW)

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TO EACH ITS OWN

School Context and School Change

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The preparation of this report was supported by funds from the National Institute of Education, United States Department of Education. The opinions expressed do not necessarily reflect the position or policy of NIE, and no official endorsement should be inferred.

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ABSTRACT

Research has demonstrated that individuals external to a school greatly enhance the effectiveness of planned change projects. Indeed, "field agents" such as district curriculum coordinators, consultants, state education agency staff, and intermediate service agency staff can often be the key factors separating success from failure. Nevertheless, not all field agents and projects achieve their objectives. The same person or project can be eminently successful in one school and miserably ineffective in another. This report addresses the question of why some change efforts work in some places and not others. Based on data collected from 14 elementary, junior high, and high schools over a three-year period, the report argues that existing school contextual conditions inevitably mingle with the change process to yield substantially different results from school to school.

The 14 sites varied in level (five elementary, six junior high, and three high schools) and type of community served (two big city, four small city, four suburban, and four rural). Each school participated in a project concerning the improvement of its basic skills, career education, or citizen education program. Project activities and approaches to developing plans for the individual schools were initially designed by an external assistance agency. Groups of teachers, administrators, and other staff worked with field agents from the agency to plan and implement changes, most of which were at the classroom level. Research methods were largely qualitative and included formal and informal interviews, informal observations, and document reviews. A comparative case study approach was used to

analyze data across the 14 sites. That is, researchers developed explanations of events in individual sites and then refined those explanations as they compared and interpreted data from other sites.

In the schools studied, effective field agent activities, how planning was carried out, the effects of local participation, how widely classroom changes were implemented, and how long the changes lasted were all acutely susceptible to the influence of eight school contextual conditions. These conditions were: (1) the availability of school resources, (2) the availability and nature of incentives and disincentives for innovative behavior, (3) the nature of a school's linkages, (4) existing school goals and priorities, (5) the nature and extent of faculty factions and tensions, (6) turnover in key administrative and faculty positions, (7) the nature of knowledge use and current instructional and administrative practices, and (8) the prior history of change projects. Not all conditions were influential at the same time. Some posed obstacles early in the projects and subsequently disappeared, while others did not manifest themselves until changes were actually attempted.

For field agents, these findings mean that each school presents its own set of challenges which must be met in ways uniquely appropriate for that school. Agents, then, must weave their understandings of school conditions into the strategies they expect to use. The product should be greater effectiveness in improving schools.

ACKNOWLEDGMENTS

Numerous people have made critical contributions to this report. Foremost are the staffs of the 14 schools who allowed researchers to invade their buildings and infringe on scarce time. Rarely did anyone refuse to be interviewed or observed, and only then because of a busy schedule, and no one objected to the presence of outsiders. These individuals must, however, remain nameless. RBS Development Division field agents were equally generous with their time and provided keen insights and observations about the projects and schools. Other Division staff also made important contributions to the study from time to time. The interpretations and recommendations contained herein are much the stronger as a result.

Specific individuals have critiqued all or part of the document which follows. Janet Caldwell, John Connolly, Joe D'Amico, Terry Deal, John Hopkins, Keith Kershner, Karen Louis, Skip McCann, and Jane Roberts have all given their time and wisdom. They share the credit for the report's strengths and are, of course, blameless for its weaknesses. Additional appreciation is extended to Mike Palladino for considerable assistance with data management, to Bruce Wilson for statistical analysis help, and to Carol Crociante and Vickie Jordan for typing.

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CHAPTER I

Introduction

Why do some schools readily welcome new practices to improve student learning while others seem impervious to the winds of change? And why are consultants and curriculum coordinators successful in some schools and fail so miserably in the others? A decade of intensive research on school change has produced few answers to these questions. It is commonly accepted, for example, that changing urban schools is difficult. The fact remains, however, that some urban schools do change, and for the better (Benjamin, 1981). Probably no matter what kind of schools one examines, some will change constructively and others not at all. In recognition of this, researchers are beginning to turn their attention from the search for universal principles of change to understanding the conditions under which change projects succeed or fail.

This general approach was used in the study upon which this report is based. The research began as an attempt to understand how one external technical assistance agency, Research for Better Schools (RBS), could work with schools to change their instructional programs. It focused on projects initiated in a total of 14 elementary, junior high, and high schools located in a mix of rural, suburban, and urban communities. As research progressed, however, it became more and more apparent that the same people using the same techniques were having very different effects from school to school. Consequently, the research focus gradually shifted from RBS' activities to understanding how local contexts affected the relationship between change strategies and project outcomes. In other words, the

purpose of the research became the identification of school conditions which affected how changes were planned, how new practices were implemented, and whether the changes lasted. The basic argument of this report is that there is an inevitable mingling of local conditions and the change process which produces different outcomes from one school to another.

To be effective, then, those who provide assistance to schools must be sensitive to these conditions and must take them into account in their work. More specifically, educational consultants, district curriculum coordinators, state education agency (SEA) staff, and intermediate service agency (ISA) personnel must systematically seek out certain information about the clients with whom they work, note differences among clients, and anticipate the potential effects on a project these differences may have. This report denotes this collection of individuals who serve schools as "field agents," and it is to this audience that the report is directed. The intent is to draw attention to specific school conditions which have important implications for the process and outcomes of assisting schools.

This introductory chapter provides brief background information on the study and previews later discussions about school characteristics, the change process, and change outcomes.

Background

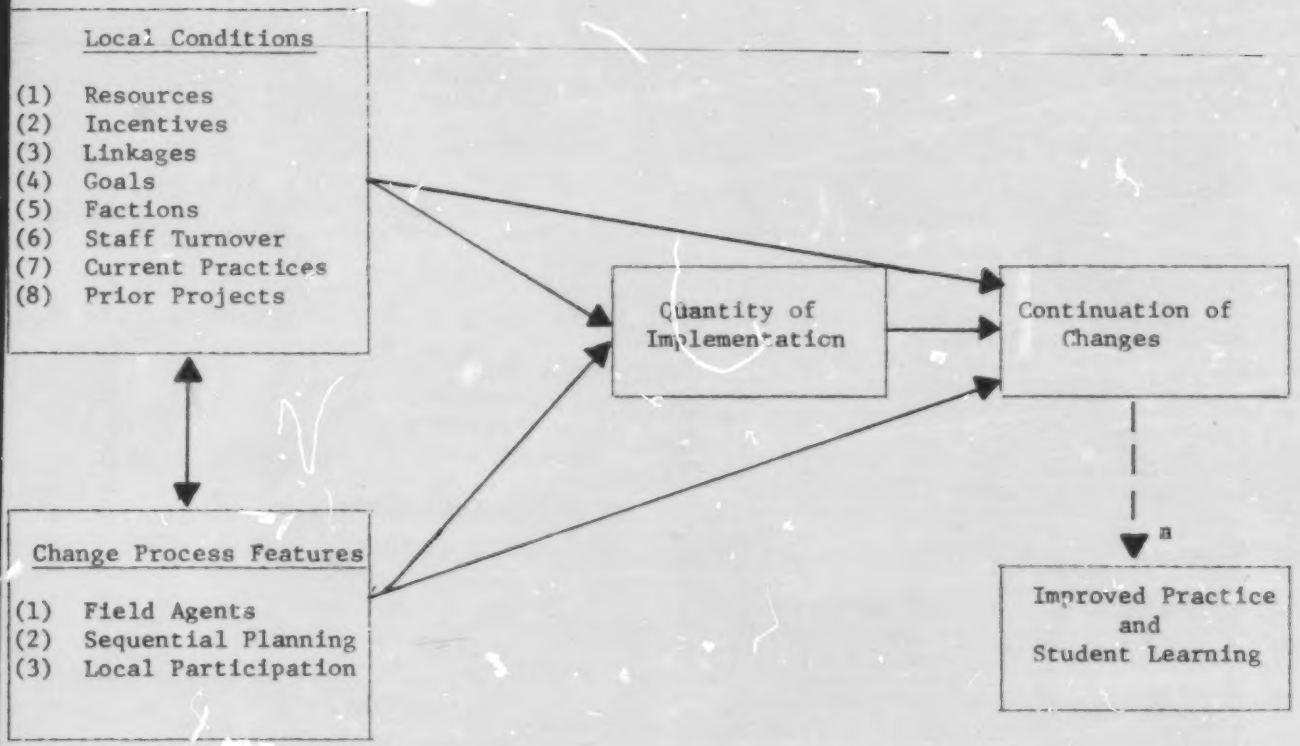
In 1978, RBS began to develop ways to facilitate school improvement in basic skills, career preparation, and citizen education. The final product in each content area was to be a set of procedures and materials that RBS staff or other individuals who assist schools could use to help schools identify and overcome their programmatic weaknesses. To aid the develop-

ment of these new efforts, RBS entered into a cooperative agreement with 13 schools (later, one more was added). RBS worked with the schools in systematically collecting data to select project goals. The schools then determined specific changes they wanted to make and spearheaded their development. Although the innovations varied from school to school, the bulk of them consisted of alterations in instructional methods, scheduling practices, administrative behavior, or special courses and activities for students.

A Conceptual Approach to Planned Change

Figure 1 summarizes the overall conceptual approach which guided the study. The expectation was that change implementation and continuation outcomes would be products of the interaction between local school conditions and the change process--an understudied hypothesis, but certainly common-sensical. The key was to understand which local conditions were important, what aspects of the change process were particularly susceptible to their influence, and how this all affected project results.

Figure 1 shows the local conditions, features of the change process, and change outcomes examined in this study. Local conditions drew particular attention as the research proceeded because of the special importance that school level factors had as influences on the change process. These factors include both organizational ones such as school resources and goals, and cultural ones as reflected in the kinds of incentives provided, staff factions and tensions, and perceptions about prior projects. Conspicuous by its absence is one often-noted influence on change--the school's environment. Issues like school-SEA relationships receive mention



a----- = expected but unexamined relationship; studies of school change attempt to explain implementation and/or continuation outcomes whereas studies of school improvement seek to discover whether the changes actually prove to be beneficial. This study is of school change; one to two years provided too short a time span to make global assessments of benefit.

Figure 1. Conceptual Approach of the Study

in the report but were not among the most salient factors for explaining what happened during the projects studied. Additionally, local community concerns did not present a major obstacle, possibly because RBS project-related changes affected day-to-day practice more than district-wide policies. To be sure, community wants and desires were always in the forefront of participants' minds; however, participants rarely pointed to them as critical to address during the project.

The three features of the change process listed at the bottom left-hand corner of Figure 1 are those which were integral to the RBS change approaches, have received considerable attention in the published literature, and, most important, directly pertain to the daily work of field agents. To be a field agent means that one is physically present in schools a great deal of the time. This presence is vital to the success of change projects because agents are able to adapt, adjust, and drop procedures and materials as needed (Louis, 1981). Field agents also tend to have longer-term working relationships with a school than simply racing in to give a single workshop. Thus, the issues of sequential planning and encouraging local participation are highly relevant features of the change process as well.

Local conditions, field agents' planning and participation activities, and the interaction of the two combine to influence implementation and continuation. Implementation refers to the amount of change that is initially put into place; continuation refers to the amount of change that lasts. Of course, the ultimate concern of school participants is: Do the changes that last make a difference for student learning? This question about the effectiveness of the changes is beyond the scope of this study simply be-

cause enough time had not elapsed by the study's end to assess well whether new practices had beneficial effects, the critical phenomena attended to here are whether change occurs and whether it lasts. Thus, this study is of school change not school improvement.

The remainder of this section goes into a little more detail about local conditions, features of the change process, and outcomes. It provides a brief venture into the voluminous literature on planned change and foreshadows the major findings of the study.

Local Conditions

In school change efforts, local conditions belong to a class of events referred to by Hall, Zigarmi, and Hord (1979:16) as "unsponsored interventions." That is, they are "not intended to influence use of the innovation, although, in fact, they do." The same authors point out that when such intrusions repeat themselves over time, they can be called "themes." That is the light in which the reader should view the local conditions presented in this report. They are themes which frequently force themselves into the spotlight, occasionally echo hauntingly in the background, and disappear, only to return suddenly to the forefront depending upon the aspect of the change process or change outcome being examined.

The conditions discussed here are likely to affect any school change project. They are already present in a school when a particular project begins (although they certainly can be subsequently altered). Eight local school conditions helped shape the change process and outcomes at the 14 schools studied. They are discussed in the order of the magnitude of their effects on the projects. The conditions are: (1) the availability of

school resources; (2) the availability and nature of incentives and disincentives for innovative behavior; (3) the nature of a school's linkages; (4) existing school goals and priorities; (5) the nature and extent of faculty factions and tensions; (6) turnover in key administrative and faculty positions; (7) the nature of knowledge use and current instructional and administrative practices; and (8) the prior history of change projects.

More than any other local condition, the availability of school resources influences how strategies are enacted in a school. If staff time and the money to purchase staff time and materials are scarce, it is unlikely that change activities will make much, if any, headway. The source of resources is also critical. External support for change helps initiate a project, but it is only when a school contributes the major portion of the resources that lasting change ensues (Berman and McLaughlin, 1978; Chabotar, Louis, and Sjogren, 1981). Additionally, how resources such as staff time to plan an innovation are obtained can have unintended consequences that later make themselves felt in the change process.

Second, Lortie (1975) argues that there are very few rewards available to teachers, and the ones that are available offer little material advantage. Nevertheless, incentives (any source of gratification or deprivation) play a critical part in the change process (Sieber, 1981). For example, one school may offer money, extra planning time, or inservice credit to reward innovative behavior; another school may only give poor evaluations for the lack of such behavior; and still another may adjust classroom responsibilities to relieve staff of the extra burdens imposed by participating in a project. Probably in any single school it will be

necessary to do all of the above. How the issue is resolved has considerable implications for the success of a change effort.

Third, research on how organizational characteristics affect change covers a wide assembly of factors, including size and complexity (Baldridge and Burnham, 1975; Corwin, 1975) and funding patterns and spacial arrangements (Deal, Meyer, and Scott, 1975). This report focuses on an aspect of school organization that more closely touches the day-to-day operation of a school than the above factors: linkages, or the interdependence of individuals and subunits (e.g., grade level teams or departments). Discussions of this issue in education abound, especially in recent literature on loose-coupling (e.g., Glatthorn, 1981; Weick, 1982). However, concern with how work activities and organizational members are bound to one another has a long historical tradition in the study of organizations (Corwin, 1981). In some schools, there may be a direct correspondence between change activities and subsequent behavior in the school as a whole. But given that most schools are loosely coupled (Miles, 1981), it is more than likely that special efforts will have to be undertaken to integrate change into a school.

The fourth local condition is school and district priorities. The better the fit between the objectives of a change project and a school, the greater the likelihood that change will result; and the more similar the change objectives are to a district's goals, the better the chance that changes will be continued (Berman and McLaughlin, 1976). When there is such a match, there is little disruption in the flow of change activities. The problem arises when change objectives fall below a district's top three or four priorities. Then, events such as a sudden shortage of resources

are much more apt to interrupt the change process and require that it be adjusted before a project can continue.

Fifth, schools can be viewed from a political perspective. In this light the often-competing interests of different factions within a faculty become apparent (Firestone, 1980). Differences between teachers and administrators are obvious foci for investigation; but teachers do not comprise a homogeneous body of interests in a school. Rather, a faculty often presents a rich array of formal and informal coalitions of varying intensity and endurance. If not taken into account, such factors can sidetrack, stall, or stop the change process.

Sixth, schools vary in the amount of staff turnover. It is perhaps not too common to encounter a school where a teacher with the lowest seniority in a department may, in fact, have taught in the building for 12 years. Likewise it may be equally uncommon to find a school where the coming and going of staff is so frequent that names are unknown and faces only vaguely familiar. Nevertheless, school staff turnover can vary widely between these two extremes. The consequences of turnover on change projects can be considerable, especially if a principal who supports a project leaves and is replaced by another whose priorities are different. Similarly, when a respected teacher who strongly advocates a project leaves, enthusiasm for the project among teachers can suffer (Fullan, 1982).

Seventh, from all indications, a project has to carefully strike a balance in how much an innovation requires behavior to depart from existing practices. Research suggests that complex projects which seek wide-ranging effects have a high impact (Louis, Rosenblum, and Molitor, 1981); however, if projects are too ambitious they may fail (Berman and McLaughlin, 1976).

On the other hand, Paul (1977) notes that the greater the compatibility of change to current practice, the greater the trivialness of the changes. The procedures used to devise an innovation can also require school staff to behave in unaccustomed ways. For example, many projects attempt to encourage the use of research-based knowledge to make decisions; yet school personnel rarely seek this type of knowledge in their day-to-day work (Hood and Blackwell, 1978). Thus, the congruence between an innovation and its associated activities with current practices in a school has considerable implications for the change process.

Finally, although Fullan (1981) indicates that there has been little investigation of the carryover effects from one change project in a school to another, the research literature hints that this can have an impact (Kozuch, 1979; Paul, 1977). The cumulative residue of prior projects in a school creates a legacy of change. This legacy partially sets a staff's expectations for subsequent school improvement efforts and can affect their willingness and ability to participate.

For the most part, research examines the above factors with respect to how changes are adopted rather than in a configuration also involving the change process. This report acknowledges that school context can have direct effects on change outcomes. However, local conditions also have a substantial impact on the process of change, and it is this impact which primarily affects how change activities proceed and the results they produce.

Features of the Change Process

Three of the features of the change projects studied have been part of many change efforts and, so, have been documented amply in the literature on planned change. These are (1) the use of external field agents, (2) sequential and systematic planning, and (3) encouraging teacher participation.

Each of Chapters Three through Five examines the interplay between local school conditions and one of these features. Chapter Three focuses on the use of field agents to facilitate change. A field agent "is an individual...located outside of the boundaries of the client system, whose objective is to assist client(s)... to enhance the clients' functioning as educators or as an educational system" (Louis, 1981: 180). Field agents have been pivotal actors in educational change efforts such as the Research and Development Utilization project (Louis and Kell, 1981), the National Diffusion Network (Emrick, Peterson, and Agarawala-Rogers, 1977), and the projects represented in the study of Dissemination Efforts Supporting School Improvement (Crandall, Bouchner, Loucks, and Schmidt, 1982). They have played an important part in change activities in areas other than education as well, most notably in agriculture (Ryan and Gross, 1943). In the 1960s and early 1970s, school improvement was dominated by an emphasis on currriculum development. Resources were poured into the creation of exemplary learning materials to be adopted by schools. Because school personnel were to use the materials as designed, change projects tended to ignore implementation issues. When it became apparent that these projects were not meeting expectations, the issue of implementation came to the forefront. Not surprisingly, it was found that implementation was a

complex process. There were many vagueries and opportunities for implementation to become sidetracked. Thus, school improvement efforts began to rely more heavily on field agents who could work directly with schools to facilitate understanding of the innovations and assist implementation activities.

Chapter Three suggests that how field agents actually carried out their activities at a site was very susceptible to the influence of local conditions, particularly the availability of staff time to plan, existing tensions and factions within a faculty, and staff turnover. Essentially, field agents had to be flexible about what they considered appropriate activities at a site. The ability to adapt on the spot and to fill leadership gaps proved propitious for keeping projects moving and alive.

A second change process feature (examined in Chapter Four) is sequential, or systematic, planning. This kind of planning is intended to lead to a school's adoption of a change which is highly appropriate for its immediate circumstances. Generally, such planning uses a problem-solving approach that involves identifying a problem, systematically collecting data on the nature of the problem, searching for alternative solutions, and selecting a solution (Hage and Aiken, 1970). The basic assumption behind such planning, of course, is that the more appropriate a solution is for a school, the more likely it is to be implemented sucessfully and to have beneficial results. Variants of this style of planning are provided for in the plans of most change projects (e.g., Herriott and Gross, 1979).

The question of whether highly systematic planning is possible in schools has been debated (Clark, 1981). In this study, efforts to simply conduct planning activities in a logical sequence ran into difficulty.

Schools had trouble coordinating release time for teachers and buffering themselves against unanticipated demands and periodic changes in priorities. The consequence was that activities did not always occur when intended, if they occurred at all. Moreover, teachers typically based their classroom decisions on what their common sense knowledge told them. The availability of systematically collected data did not automatically change their style of decision making.

Chapter Five addresses a feature of the change process which has received much attention in the organizational development literature: encouraging staff participation in implementation planning. This feature has assumed a prominent place in many school improvement efforts (Giacquinta, 1973). Studies conducted by the Rand Corporation showed that in schools where a process of "mutual adaptation" of the innovation occurred, there was greater likelihood that changes would be implemented and eventually incorporated (Berman and McLaughlin, 1976; McLaughlin, 1976). By providing the opportunity for participants to discuss and plan changes, greater commitment to, or "ownership" of, the innovation should ensue, along with a higher quality innovation (Bartunek and Keys, 1979). In turn, such conditions should lead to successful implementation.

In this study, participation was not always a positive influence. When teachers felt their students suffered under the tutelage of substitutes or when teachers had to forego too many planning periods, participation became a disincentive to change rather than an incentive. Thus, field agents found it necessary to occasionally reduce participation in order to maintain staff commitment to a project.

Change Outcomes: Implementation and Continuation

When is an innovation implemented? Does ritualistic adherence to an innovation's original guidelines represent more or less implementation than adapting those guidelines to unique circumstances? What are the side effects of change projects? How important are affective outcomes as opposed to technical outcomes? How long do changes last once they are made?

Studying innovation outcomes has become considerably more complex than it was in the days when the major concern was whether or not a farmer used a new kind of seed. In part, the complexity stems from moving the object of study from individual adopters--e.g., farmers--to organizations--e.g., schools (Baldridge and Deal, 1975). Another source of complexity lies in the variety of potential outcomes. For example, Larsen and Werner (1981) identify seven types of knowledge use from "nothing done" to "steps toward implementation taken" to "adaptation of information." Hall and Loucks (1977) have developed a similar but more elaborate classification of levels of use of an innovation. And these two efforts capture only the possible direct outcomes of an intervention. They ignore the numerous unintended ramifications a change project can have in an organization. Greater attention to a project's varied outcomes and how long they last is beneficial because it inevitably results in a better understanding of a project's impact. At the same time, it makes the research task more difficult because phenomena that require explanation seem to proliferate.

This study examines the number of individuals who actually made project-related changes (implementation) and who still used the new practices after formal project activities had ended (continuation). Changes

are defined as any alterations of behavior participants and non-participants acknowledged as having been made as a result of the projects, whether they were initially intended or not. Many staff noted awareness changes as well; but unless awareness was translated into action, it was not considered as an actual change.

Chapter Six focuses specifically on how organizational linkages within a school affect how widely implementation spreads. Current thinking about school organization notes that schools are not tightly-structured bureaucratic institutions. Instead, they have a high degree of independence, or loose coupling, of actors and actions (Corbett, 1982a; Deal & Celloti, 1980; Firestone & Herriott, 1982; Glatthorn, 1981; Miles, 1981; Rosenblum & Louis, 1981; Weick, 1976). The same line of thinking suggests that widespread change is problematic where teachers are loosely linked to one another and to the administration. As a result, field agents face major obstacles in facilitating school-wide changes.

In this study, this notion held true. The more independent teachers were and the less congruence there was among staff about school priorities, the lower the quantity of implementation. However, a critical finding was that no school displayed uniformly loose or tight linkages. Instead, there were considerable differences across grade levels or departments. Thus, to be effective, a field agent has to map the organization of a school, noting where interdependence and independence exists. Field agents, then, must use different strategies for spreading change to various subunits within a school.

Chapter Seven carries the examination of change outcomes one step further. It looks at what happens to change over time. Research indicates

that once changes are made, they do not automatically last. Instead special care has to be exercised to ensure that (1) changes become part of operating routines, (2) individuals making changes continue to receive encouragement and support for engaging in new practices, and (3) assessments of the effectiveness of the new practices take place (Corbett, 1982b; Glaser, 1981; Yin, et al., 1979). If the above do not occur, the fruits of change efforts quickly wither.

This study affirms the above conclusions for schools. Numerous teachers described the tendency for effects of previous projects to die out rapidly once the attention of administrators and field agents turned elsewhere. In the RBS projects, unless provisions were made to maintain some level of incentives for teachers to continue new practices or to incorporate the new practices into curriculum guidelines, the new practices were discontinued before any assessments of their effectiveness could be made.

A Final Word About the Report

This report is directed to field agents. Although Chapters Three through Seven support explanations, interpretations, and arguments with considerable data, the data are there as much to convey the texture of school life and its interaction with the change projects as they are to persuade other researchers that the findings are accurate. Moreover, at the end of each chapter the discussion returns to the question: So what does this mean for field agents? This question is addressed in even more detail in the concluding chapter of the report.

Obviously a study of 14 schools will not be the ultimate and comprehensive statement on how field agents should work with schools. It has no aspirations to be that. What it does aspire to do is (1) to identify specific ways in which local school conditions can vary and (2) to trace how these local conditions affect the change process and change outcomes. The intention is that such information will provide grist for the mill as field agents ponder how they should work with particular schools.

CHAPTER II

Overview of the Study

Surprises seemed to be the rule rather than the exception in all of the 14 projects studied. Just as a project appeared doomed to failure, interest in it would revive; similarly, where success seemed assured, disruptive influences would emerge. What this says is that schools are unpredictable. Familiarity with them does not protect against the unexpected. A school is a school is a school may accurately reflect the ruminations of someone remembering dull adolescent days, but this attitude can quickly lead field agents astray if applied to the task of providing assistance.

Likewise, when it comes to studying schools, researchers must guard against over-confidence. Research procedures must leave room for the unexpected to hit one over the head. To enable this to happen, this study relied on unstructured and semi-structured interviews and observations. The intent was not to cast away preconceptions but to inform them. This chapter introduces the projects, the schools, and the research methods. It conveys the richness and variety of the settings and explains how the research procedures attempted to capture them.

The Projects

Three organizational components within RBS' Development Division had the responsibility of designing approaches to school improvement in the program areas of basic skills, career preparation, and citizen education. Each area had been designated as a priority by state departments in RBS' service region. Although general corporate guidelines set broad parameters, each

component had considerable leeway in accommodating both the state of the art in its field and the experience of its staff.

Despite differences among the three approaches, they had four characteristics in common. First, each approach relied on field agents to be the major contacts with the schools. The term "field agent" is simply a designation for an individual who bridges the gap between schools and sources of external information. The RBS agents shared technical information, assisted planning, and located materials to support the schools' efforts to improve. Second, the three approaches were developmental. That is, at the same time that RBS helped schools improve, it was field-testing and refining the approaches themselves. School staff consented to this two-way flow of assistance and rarely seemed troubled when told, for example, that a certain planning activity was an experiment that could possibly fail. Third, RBS was committed to involving a broad spectrum of local staff in planning activities. At a minimum, planning groups included teachers and building administrators; most also incorporated counselors and other district office staff. Fourth, schools did not pay RBS for its services. RBS covered the costs of development, field agents' time, and the necessary printed materials; in return, schools agreed to release project staff to attend meetings.

Of course, there were differences in the components' approaches. The basic skills projects focused on increasing students' time-on-task and clarifying overlap in students' learning, the content of reading and math instruction, and achievement test items. Teachers gathered data on their classroom operations and compared these data with research findings on what the probable learning outcomes would be. From these comparisons, teachers

and administrators could pick out which instructional areas needed to improve. Some of the classroom-level changes made included reducing the transition time between activities, using more whole-group instruction, re-sequencing instructional content, and reallocating instructional time. Occasionally, however, building level changes were also made, e.g., re-scheduling art or music classes, adjusting the way special education students were pulled from regular classrooms, and revising teacher supevision practices. Five elementary schools and one middle school that participated in basic skills projects were included in this study. Of these, the middle school and two of the elementaries took part only in the project's first year; research data for this study, however, were collected at the schools for three years.

In career preparation RBS worked with three high schools and one junior high. The intent was to integrate the topic into other subject areas, especially math, science, English, and social studies. The assumption was that all students needed help adjusting to the world of work, not just those about to leave high school. Specific aspects of work emphasized at a school were agreed upon through a series of planning meetings, surveys, and investigations of other career programs. Once a planning committee formulated its goals, it began to develop objectives and activities to meet them. A pilot test of potential changes then followed. One major change eventually made in all four career education schools studied was the incorporation of career-related activities into regular subject courses. In addition, some schools developed special career education courses and displayed related career materials so that they would be accessible to all teachers. At the

junior high, a new principal formally withdrew the school from the project after the second year, but some project-related activities continued.

The citizen education projects were similar to those in career preparation in that all four junior highs that participated used a systematic planning process to identify project goals. In this case, planning committees also included community representatives because both RBS and the schools expected that improved community-school relations would become one of the goals selected. Project-related changes were made in classrooms where teachers infused citizen education activities into regular courses and in the ways in which certain student behaviors were rewarded. RBS worked with the schools for a little over one year before federal support for the projects was withdrawn. Formal on-site research observations at these sites also ended at that time. However, more than a year and a half later, researchers returned to the schools to interview staff about what from the projects had survived.

The criteria used to determine which schools were selected to collaborate with RBS differed in each project area. In basic skills, schools were first nominated by intermediate service agencies; in career education, they were selected on the basis of their previous interest in obtaining special state assistance funds for career programs; and in citizen education, RBS staff sought schools which had acute social problems. The participating sites are described in more detail below.

The Schools

The 14 schools in the study represented a diverse mixture of size, type of community served, and student body composition (Figure 2). The following

NAME	LEVEL	NUMBER OF CLASSROOM TEACHERS	PERCENT OF MINORITY STUDENTS	COMMUNITY SERVED	RBS PROJECT
Patriot	Elementary	18	95%	Small City	Basic Skills
Middleburg	Elementary	31	11%	Suburban	Basic Skills
Middletown	Elementary	22	21%	Suburban	Basic Skills
Southend	Elementary	13	20%	Rural	Basic Skills
Smalltown	Elementary	35	33%	Rural	Basic Skills
Smalltown	Middle	38	21%	Rural	Basic Skills
Urban	Junior High	77	61%	Big City	Citizen Education
Farmcenter	Junior High	43	19%	Small City	Citizen Education
Riverside	Middle	63	96%	Big City	Citizen Education
Suburban	Junior High	49	2%	Suburban	Citizen Education
Green Hills	Junior High	45	8%	Suburban	Career Preparation
Neighbortown	Senior High	49	0%	Rural	Career Preparation
bigtown	Senior High	150	92%	Small City	Career Preparation
Oldtown	Senior High	141	55%	Small City	Career Preparation

Figure 2. The 14 Schools.

thumbnail sketches introduce the research sites and provide a flavor for the kinds of institutions RBS staff found once in the field. School names used throughout this report are fictitious.

Middleburg Elementary

Middleburg is located on the fringes of a major urban city and is one of the earliest suburban developments in the area. Its residents are split between those who commute to the city to their jobs, and those who work in local factories. The school has 31 teachers and enrolls more than 650 K-6 students, about 90 percent of whom are white. Just before the beginning of the RBS project, declining enrollment forced the district to lay off over 100 teachers and shift some administrators back to classrooms. According to the principal, the decline had been as much as 30 percent over the previous four years. The school was one of the five original basic skills sites. However, at the beginning of the project's second year, the principal opted to allocate staff development resources to another project and so withdrew the school from further work with RBS.

Middletown Elementary

Middletown replaced Middleburg as a basic skills site. School administrators there had already observed several RBS meetings at another project school and were keenly interested in pulling up the level of students' math and reading skills. The school continued in the project for the remaining two years of the study. Middletown is in a community very similar to Middleburg's, but with a greater racial mix and a less dramatic declining enrollment. The school is about two-thirds the size of Middleburg, in terms

of numbers of teachers and students, and is the only elementary school in the district.

Patriot Elementary

Patriot is a K-4 school in the heart of a medium-size city. The school, and many of the surrounding buildings, are monuments to the typical factory style of urban architecture prevalent in the early part of this century. Eighteen classroom teachers are responsible for slightly less than 400 children, almost all of whom come from minority groups. As the project began, administrators said they were beleagued with low achievement levels; Patriot's principal estimated that 75 percent of the students were at least a year behind in reading. Additionally, the school was informally projected by the state education agency as one of thirty schools unlikely to meet proposed minimum standards. The school participated in the basic skills project for all three years of the study.

Smalltown Elementary

In sharp contrast to Patriot, Smalltown Elementary is located on the edge of a small farming town and is surrounded by open fertile fields. The newly constructed school houses 35 classroom teachers and over 600 students in grades one through six. The proportion of white students to minority students is roughly two to one. The number of advanced degrees held by Smalltown's faculty is one of the two lowest of the 14 schools studied. Nevertheless, there is a considerable flow of new ideas through frequent staff development projects initiated by the superintendent. After involving the school in the basic skills project for one year, the superintendent shifted its staff development focus to another area.

Southend Elementary

Southend is in the same district as Smalltown Elementary. However, at this site, the superintendent kept Southend in the project for all three years. Unlike Smalltown, where the emphasis is on providing a variety of instructional styles in an open-classroom situation, Southend's priority is attention to the basic skills of reading and math. Along with this, there is a close watch on student discipline. Strategically placed signs continually remind staff, students, and visitors to lower their voices and to move safely in the halls. Families in the community may send their children to either of the two schools. Southend is smaller than Smalltown, with 13 teachers serving less than 300 students in kindergarten through fourth grade.

Farmcenter Junior High

Farmcenter presents some interesting contrasts. To reach the medium-size city in which it is located, a traveler passes through one of the richest, highest-yielding farm regions in the United States. The school itself, though, is in the third largest district in the study and its imposing one-building campus is squeezed in among a neighborhood of inner-city-like rowhouses. Only slightly more than 20 percent of its 43 teachers have advanced degrees, in spite of the fact that the shadows of a sizeable university fall across the schoolyard. According to the principal, 75 percent of the nearly 700 students (80 percent of whom are white) are at least one year behind the average in reading. Farmcenter took part in the citizen education project until the project terminated shortly after its first year.

Green Hills Junior High

Green Hills is a typical suburban school. The building is relatively new and cleanly-kept; its spacious playing fields are enclosed by large, colonial-style homes; and class period transitions are orderly. Completing the familiar portrait is a largely homogenous student body with a high percentage of parents who attended college. The students with severe reading problems are so few that the principal could almost list them by name. The one major problem confronting the principal and the school's 45 teachers is declining enrollment. A recent 20 percent enrollment drop compelled the school board to look for ways to reduce staff and programs. Participation in RBS' career education program provided one way for the principal to show that efforts were being made to upgrade all instructional areas and that none should be candidates for reductions. However, the principal moved to a district office job after the project's second year and the new principal declined to accept subsequent RBS assistance.

Riverside Middle School

Riverside's appearance is the opposite of Green Hills. Barred windows, locked doors, graffiti, and an almost ever-present police patrol car are the distinguishing landmarks at this sixth through eighth-grade school. The principal estimates that 90 percent of its nearly 1,000 students have severe difficulty reading. Because of the many learning and behavioral problems the school faces, staff have learned the ins and outs of various forms of outside assistance. The result has been that many of the 63 faculty look at such assistance askance. Although the school participated in the citizen education project until its end, the number of faculty who participated from meeting to meeting fluctuated greatly.

Smalltown Middle

Southend and Smalltown Elementary students graduate to this rural, 6-8 school. Smalltown Middle School has 38 teachers and roughly 575 students. About one-fourth of the students lag at least one year behind in reading. The school formally participated in the basic skills project for one year, at which time the superintendent initiated other staff development opportunities for the faculty.

Suburban Junior High

Suburban is much like a composite of the other schools in this study. Like Farmcenter, it is located in a farming region. However, as is the case with three other schools, its proximity to major cities makes the area attractive to large numbers of commuters. Its school district is the second smallest in the study, behind Middletown's. Forty-nine teachers serve 830 adolescents, two percent of whom are minority students. This degree of student homogeneity is only exceeded at Neighbortown. The principal reported that enrollment had not declined at all in the four years prior to the beginning of the citizen education project. Only the three schools in Southend's district and Neighbortown had similar situations. As did Farmcenter and Riverside, the school remained in the citizen education project until the project ended.

Urban Junior High

Although this urban school officially remained in the citizen education project until the project's close, the effort never really got off the ground. Teachers continually questioned the wisdom of devoting resources to this kind of project when there were more pressing problems such as a lack

of heat, inadequate student nutrition, and widespread reading deficiencies. Making obstacles even more difficult to overcome was the fact that the district's desegregation plan had filled the buildings, located in a nearly all-white neighborhood, with 61 percent minority students. The school's 77 teachers, over half of whom hold advanced degrees, instruct 1500 students.

Bigtown High School

Bigtown has the largest faculty of the schools in the study. The 150 teachers work with more than 2,600 students, 92 percent of whom come from minority families. The school belies its urban designation. It is surrounded by neat, well-kept residential neighborhoods and its sprawling campus shows few signs of vandalism. Moreover, the principal estimates that less than half of the students have reading difficulties. The administration regards preparing students for the world of work as a top priority. This emphasis naturally attracted RBS to the school. Bigtown participated in the career education project for all three years.

Neighbortown High School

Neighbortown serves a rural community whose economic base is in agriculture and small industries. Its bucolic setting and proximity to major transportation routes have lured branches of several large companies as well. This apparently happy situation creates a problem at the high school: students drop out of school because employment is so easy to obtain. To a great many of the school's 800 teenagers, the prospects of earning five dollars an hour during time normally spent in the classrooms of Neighbortown's 49 teachers is too tempting. Moreover, few of their parents have continued their education at colleges and universities. Thus, school and district

administrators were anxious to use RBS' career education project as a way of expanding students' conceptions of the world of work.

Oldtown High School

Upon entering Oldtown's 60 year-old building, a likely assumption might be that this high school is the urban receptacle of the graduates from Riverside or Urban. The granite block structure consumes an entire city block; 140 teachers wear identification badges so that they can be distinguished from visitors; and even when classes are in session, there seems to be constant student movement in the hallways and on the outside steps. Yet if a visitor scans the adjacent neighborhood, strains to identify background sounds, and breathes in the air, the senses correct the first impression. Oldtown is only a few blocks away from sandy beaches, the crashing surf, and a glittering array of resort businesses. Still, academic problems abound. The principal guesses that 60 percent of the more than 3,000 students have fallen at least a year behind in reading. Also, the school struggles continually to meet a steady stream of state regulations. Consequently, the school's participation throughout the three years of the RBS career education project was episodic--a mix of enthusiastic attention and lengthy inactivity.

The Research

Data were collected primarily through qualitative research procedures, such as formal and informal interviews, informal observations, and document reviews. The research followed a comparative case study approach in that the intent was to understand planned change events in 14 sites and then identify commonalities across the sites (Yin, 1981). As was true in this

study, this kind of research is often conducted without actually writing case studies on individual sites. Instead, analysis draws out cross-site comparisons. Obviously such an analytic approach precludes a detailed presentation of the change process at any one school; the trade-off is that the reader should come away with much keener insights into the change process itself.

Qualitative methods were especially appropriate in this study for three reasons. First, one of the guiding assumptions of the study was that school context would have a critical impact on how the change process was enacted and eventual outcomes. Qualitative methods particularly facilitate fine-grained analyses of the interaction between organizational settings and individual behavior (Wilson, 1977). Second, when the study was initiated, implementation was poorly understood. Most research had focused on adoption of innovations, ignoring what happened to new practices and materials as they were actually used or discarded (Fullan & Pomfret, 1977). Repeated interviews and observations made it possible to collect data on events as they unfolded over time, thereby enabling researchers to see just where changes were made, what success was achieved, and what fates the changes eventually met. Finally, in observing events, it is important to understand the meanings participants attach to them. Often what is significant is not the reality of events as they are seen by external observers but what the perceptions of the actors involved are. Thus, project participants' viewpoints are an invaluable source of data for suggesting and corroborating interpretations of why events turned out the way they did.

In the first year, researchers examined the initiation of the change projects in all 14 schools. Also, teachers completed surveys on the

organizational characteristics of their schools. A full report on these surveys is available elsewhere (Firestone & Herriott, 1981). The surveys are used in this report only at the beginning of Chapter Six. Then, in the study's second year, intensive fieldwork in five of the schools provided richer data on the intricacies of change processes and implementation. During this time, occasional visits and interviews helped track activities at the other schools. The third year of the study was devoted largely to a series of interviews at all 14 sites to determine what happened to changes after formal project activities had ended.

Managing and analyzing qualitative data so that the full range of data can be used present major obstacles for qualitative researchers. Surprisingly, these topics are only minimally addressed in the literature on this kind of research (Miles, 1979). For this reason, Appendix A describes, in detail, the procedures used in this study to store and code data and to use data to explain events at the sites.

Although the literature does not clearly elaborate on the art of analyzing qualitative data, these methods are growing in popularity (LeCompte and Goetz, 1982; Rist, 1980; Yin, 1981). However, such research can often be time-consuming and costly, diminishing its practicality for those who work with schools. Appendix B of this report suggests ways that may help field agents obtain qualitative data that can be useful in their work and be collected with a minimal burden on resources.

Chapter III

The Change Process: Field Agents

We were there at 9:30am and as usual, no one else was....The director of the cafeteria had a heart attack so the RBS field agent had a bit of a hassle getting coffee for the meeting. The field agent did go out and buy donuts this time and got some chocolate milk for the non-coffee drinkers, but there were still some requests for tea. About 10:45am, the meeting began with the local coordinator reviewing what had happened the week before....The coordinator said I don't know how many of you got copies of the goal statement....At this point, I looked around and I didn't see any copies of the goal statement on the table....The field agent had asked the coordinator to get copies of the goal statement made and the coordinator apparently was afraid to go into the principal's office and try to do that. So the field agent went in and tried to talk one of the secretaries into doing it.

(from the Riverside fieldworker's notes)

This meeting's main presentation was to be done by the assistant principal, not by RBS. The field agent had given the assistant principal the linker's manual....The assistant principal had put together the talk....The meeting was scheduled to start at 3:15....People milled around for a while, and about 3:15 the superintendent kind of looked around at people and said, "Dearly beloved", (drawing laughs from everyone).... [Later] the superintendent said the meeting went very well and the field agent agreed. A couple of people complimented the assistant principal on the assistant principal's speaking ability.

(from the Southend fieldworker's notes)

We arrived at about 8:30. The field agent greeted me with a disconcerted frown--three teachers [out of five on the team] were absent that day. The field agent had spent some time before the session in the faculty lounge. The field agent got the feeling that teachers were upset about something with the principal. Moreover, the janitor had mistaken the field agent for a planning team teacher's substitute and said that the teacher had left the day before saying "[I am] never coming back [to this school]."....The field agent wanted to hold the meeting up further [than 9:10am] to wait for the principal who was in the office with somebody, but decided to go ahead because the field agent wasn't sure when the principal would arrive....[Later, after the meeting,] the field agent suggested that the teachers are afraid to discuss things in front of the principal. The field agent went on to point out that a teacher asked a question about who would be doing the observing while the principal was outside of the room.

(from the Patriot fieldworker's notes)

Three field agents in three schools. All shared the same conviction that the key to successful school change was for the school to take major responsibility in directing the change project. Yet, their activities, as reflected in the vignettes, were widely disparate. In the first school, the agent arranged refreshments and coaxed recalcitrant support staff into providing copies of materials. In the second, the agent supplied knowledge resources and then stepped back to observe. In the last school, the field agent detected tension between teachers and the principal and began to wrestle with how to mediate it and lessen its repercussions on project activities.

Why the differences in behavior if the ultimate objective was the same? The answer is that the field agents responded to idiosyncratic features in a school's context which demanded that adjustments and substitutions be made in how to promote a school's assumption of leadership responsibilities. Thus, creating a congenial atmosphere at a meeting and ensuring the availability of necessary information were critical in keeping the change process moving smoothly enough for local leadership opportunities to arise. Anticipating the impact of conflict between the principal and teachers on the principal's ability to direct the project became a salient issue if the field agent wanted to keep the planning team together. Indeed, only in the second vignette was the field agent able to encourage school responsibility directly.

This chapter shows that some field agent activities work for some purposes in some places at some times, and what works for what purpose is mostly determined by the place and time. The chapter focuses on aspects of school context and emphasizes the flexibility that a field agent must

demonstrate in approaching a site and establishing intermediate objectives for enhancing the probability of successful school change.

The first section of the chapter briefly reviews research on effective field agent behavior and offers an explanation for its ambiguous findings. The next section closely examines local school conditions and their relationship to field agent behavior. It attempts to make sense out of a very intricate mix of conditions and behaviors by highlighting patterns across the 14 sites. In the third section, school staff comment about notable aspects of field agent activities. These comments suggest that field agent efforts to adjust their behavior to conditions at a site did not go unnoticed; these efforts were, in fact, considered to be largely responsible for the field agents' effectiveness. The chapter closes with a summary of key lessons from the discussion.

A Look at Field Agent Research

The consensus in the research literature seems to be that the use of field agents effectively promotes school change (Louis, 1981), particularly when the changes are externally-developed (Emrick, Peterson, and Agarawala-Rogers, 1977; Stearns and Norwood, 1977). Field agents seem especially useful in facilitating innovation at the school level (Loucks, 1982). However, despite many instances of effectiveness, researchers have not been able to identify many specific behaviors which consistently lead to this success.

For example, Louis (1977) and Louis and Kell (1981) found that by establishing a long-term relationship with a client, a field agent could positively influence how the information that agent brought to a site is

used. However, this finding is tempered by results from another study (Loucks, 1982) which indicate that the more time an agent devotes to training local staff, the less implementation occurs. Along the same lines, an examination of field agent behavior in the first year of the RBS projects (Firestone and Corbett, 1981) found no relationship between the development of a school's commitment to a project and the frequency of agent interaction. Similar ambiguity surrounds the effectiveness of other kinds of field agent behavior.

Qualitative data from two of the above studies point to a possible interpretation of this untenable finding (both theoretically and practically) that high field agent involvement with a site can have both positive and negative effects. Louis and Kell (1981), using case study data, concluded that one of the basic characteristics of effective field agents was their ability to adapt their behavior to site conditions. During the first year of the RBS projects, agents acted as on-site adjustors, negotiating the interaction between a site and an externally developed approach to curriculum change (Firestone and Corbett, 1981). What seems to happen at a site is that field agents confront barriers to school change posed by the interaction of an innovation with idiosyncratic features of the site, such as competing time demands, administrative reluctance to assume full leadership of a project, and inability to coordinate actions and events so that they fully mesh (Charters and Pellegrin, 1973). Specific barriers and how they are best overcome can vary from site to site. Thus, what field agent behavior is effective at a particular school must be determined in light of knowledge about the school's context.

In schools such as two of those in the opening vignettes, effective behavior meant developing an intense, time-consuming (almost a visit a week for a year or more) relationship with a site. This kind of relationship is necessary in order to discern the barriers confronting a project and to attempt to overcome them. At a school such as the one in the second example, intensive field agent involvement may actually constrain the development of school commitment, especially if the field agent assumes most of the project leadership responsibilities. This would effectively exclude willing, competent, and available staff from deep involvement and probably discourage them from expending much effort on making changes.

The data presented in the next section support the argument that effective field agents have to adjust to the nature of local conditions.

Field Agents and Local School Conditions

The field agents were the major point of contact between RBS and the schools. They were frequently in touch with the sites (typically at least five times a month in person, over the phone, or through the mail) and worked with the local planning teams at each school. The agents' technical functions were (1) to promote program improvement by bringing knowledge about successful educational practices and the change process to schools, (2) to help local staff develop the capability to direct the change process themselves, and (3) to provide feedback to RBS' development specialists on necessary revisions in the process.

In terms of existing conceptualizations of agent roles, RBS agents most closely resembled Piele's (1975) process-helper. A process-helper actively identifies a school's problems by helping to collect and analyze

data, but remains neutral with respect to decisions about which problems the school addresses and about remedies to those problems. RBS hoped that leadership for all project activities would gradually be assumed by school staff because such responsibility would promote local ownership of the project. In turn, ownership would facilitate the implementation of changes and the incorporation of these changes into the daily routine once the field agents' involvement ended.

Field agents described their intentions this way:

> It may have sounded like we provide you with research on your concern. Our business is not to provide technical assistance. If you have something that we can't cover directly, we'll direct your concerns to [central office staff] and they'll get you to the right person....To us research is to help you with this... process. (from Patriot field notes)

> Let's talk about roles and responsibilities. I won't be leading this session after today. I'll be working with a coordinator as a consultant. I'll be going through the agenda with the coordinator for each step. (from Bigtown field notes)

> Let me give you a little overview of the process. We'll be having two orientation meetings. After that second orientation meeting, I'll be fading into the background. I'm not officially a member of this team. (from Oldtown field notes)

> How dogmatic? - you might say. Not at all...At any point in the process you can decide to change you[r] goals, to change the sequence of activities, whatever - it's up to you. (from Farmcenter field notes)

And as the Southend superintendent echoed:

> I'll give you the people working with the 12 teachers. They'll make the presentation and you will act as resource people for them. I want my people to get the "invented here" message across real strong and I want to act as if it's our program. (from Southend field notes)

In reality, of course, such clear delineations of field agents' spheres of responsibility did not always come to pass. In fact, less than a year after the Southend superintendent issued the above statement, the

principal at Southend remarked, "One cannot run an inservice and take care of everything else. What I need is for someone else to come in and do it." Thus, providing project materials, training local staff to lead the project, and offering feedback to other RBS staff were hardly enough to keep the schools moving through the change process. As indicated earlier, attending solely and directly to the goal of school change was often subordinated to more immediate concerns, such as obtaining resources and developing the social relationships necessary for the change process to continue.

The Relationship Between Context and Activities

Field agents' experiences in the 14 schools indicated that four categories of contextual conditions affected the mix of agent activities necessary to smooth over rough spots in the change process. These were: (1) the availability of resources to support project activities, primarily staff time, staff expertise in the content area of the project, and clerical resources; (2) the extent of tension between intra-staff factions; (3) the amount of staff turnover and disruptions to the schools' daily routines; and (4) staff expectations about the usefulness of external assistance, based largely on their experiences in previous projects. It should be noted here that the local condition category of staff turnover is expanded in this chapter to include other disruptions that frequent school life. Unannounced meetings and staff absenteeism did not have any permanent effects on other features of the change process or its outcomes; but when they cropped up on the day of a project meeting, they did limit the number of staff available to participate.

Although in each school field agents performed the three technical functions described above, at times some agents had to supplement these in order to respond to certain school contextual conditions. They did this by: (1) expanding their process-helping activities to include leading meetings, solely establishing meeting agendas, and writing funding proposals for the school; (2) adjusting the process at a specific site apart from developmental changes that RBS made in the approaches as a whole; (3) providing clerical support like typing, duplicating, obtaining audio-visual equipment or arranging for refreshments; (4) seeking periodic re-endorsements of the project from new administrators; and (5) mediating the effects of intra-staff tensions.

Table 1 juxtaposes the four categories of local conditions with the five categories of extra field agent activities. As the table shows, agents compensated for low levels of resources by expanding process-helping (at seven schools), making idiosyncratic adjustments in the process (at seven schools), or providing clerical services (at five schools). Acute outbreaks of intra-staff tension necessitated mediating their effects on staff and the project at five sites (and, in two instances, led to adjusting the process). Two activities undertaken in responding to high levels of staff turnover and other unexpected disruptions in school life were expanding process-helping (at three schools) and seeking re-endorsements (at three schools). Staff expectations for field agents posed special problems at three urban sites and were dealt with by adjusting the change process. At the other sites, staff seemed to suspend their attitudes about previous projects, adopting a more neutral posture toward field agents. In these

cases, expectations did not compel new activities so much as they reinforced particular activities once RBS agents performed them.

The following four sections amplify the information in Table 1. Each section examines how field agents took a school condition (listed in the four columns) into account in trying to maintain progress in the projects.

Resource Availability: Time, Expertise, and Clerical Support

The availability of resources was the most important and continuous obstacle that field agents faced. At some point at every school field agents had to compensate for resource shortages. At 11 of the schools, shortages were frequent enough that field agents consistently moved beyond the activities required solely by the three RBS approaches.

Among the resources most needed to support project activities were staff time to plan and implement changes, staff familiarity with project content and expertise in planning, and clerical support. Shortages of any of these resources threatened a school's ability to move through the process. When the costs of participation became too high, staff began to question whether they should continue. At these times, field agents stepped in. By expanding process-helping, adjusting the process, or providing clerical services, they reduced costs and paved the way for planning to go forward.

Time. The time of teachers, principals, and other school staff was a critical resource needed in all of the schools. But providing this resource was more problematic in some schools than in others. Most schools managed to free teachers so that they could attend meetings. (Although how this was accomplished occasionally had a ripple effect throughout the

Table 1

Field Agent Activities and School Conditions

Field Agent Activities	School Conditions			
	Availability of Resources	Tension Between Factions	Staff Turnover and Disruptions	Expectations from Prior Projects[a]
Expanding Process-Helping	Green Hill Urban Bigtown Neighbortown Riverside Patriot Townsend	Patriot	Urban Riverside Patriot	
Adjusting the Process	Middletown Suburban Oldtown Bigtown Neighbortown Riverside Patriot	Patriot Suburban		Urban Bigtown Riverside
Providing Clerical Services	Green Hills Urban Riverside Farmcenter Patriot			
Seeking Endorsements			Green Hills Middleburg Patriot	
Mediating		Green Hills Urban Neighbortown Riverside Patiot		

[a]Expectations influenced field agent behavior at other sites than the three listed. But in these other cases, expectations reinforced activities once they were performed. Only at the three sites did expectations initially shape field agent behavior.

life-span of the project, as will be discussed in Chapter Four.) However, three schools had special difficulties. At Patriot and Riverside, substitutes were not generally available; and when they were, teachers questioned their competence. As a result, meeting days occasionally spawned traumatic incidents over whether a substitute would show up and what would happen in a class when one did. The effect was that a field agent could never be sure of the composition of the local planning team on any given day, the extreme case being one day at Riverside when no teachers and 15 students greeted the agent's arrival. At Urban, teachers were available only during a 40 minute period. Late arrivals and early departures reduced effective meeting time even further. The upshot of these constraints on teachers' time was an adjustment in the planning process, either delaying some activities, rearranging others, or meeting teachers in shifts.

More typically, though, administrators posed the major time problem for field agents. In six of the schools, the principals continually bounced in and out of meetings. Because they were, at least formally, the project leaders in these schools, their absences created an acute problem for field agents: Should activities go on in the principal's absence? An affirmative answer would keep the project from sitting dead in the water, but it would also increase the field agent's role in leading the project. For example, the field agent arrived at Green Hills one day expecting the principal to conduct the scheduled meeting, especially since several decisions that could be made only by the principal, or at least with the principal's consent, were likely to arise. The principal opened the meeting and the agent settled back to listen. After greeting everyone, the principal turned to face the agent, rose from the chair, and said while

leaving the room, "why don't I leave it with you." The agent recovered from this abrupt passing of the mantle of leadership to direct the activities, especially after it became obvious that teachers would have strongly resented being called to a meeting only to have it cancelled.

In five other schools, the principal's participation was also spotty at best. However, in these cases, there was either an assistant principal, an intermediate service agency (ISA) representative, or another administrator who could assume the leadership role. Only in three schools were the principals able to maintain a record of high attendance at meetings.

Time presented yet another kind of problem for the field agents. Most of the projects did not get started until the middle of the school year. By the time orientations were out of the way, only three or four months were left. Of course, it is well-recognized that schools have seasons of alternately calm and frenetic activity and that one of the most frenetic is the end of the year. Unfortunately for the field agents, most of the time-consuming data collection activities necessary to select project goals occurred at the end of the year. To avoid compounding staff anxiety about closing out the school year, project activities were re-shuffled, delayed, or largely taken over by RBS.

Expertise. Expertise interacted with time to create numerous problems for field agents. At Bigtown, Oldtown, Farmcenter, Middletown, and Middleburg, at least one staff member was either familiar with project activities and content or had the time to become familiar with them. At the other schools, such expertise did not exist and time was scarce enough that no one was free to both be trained and lead the meetings. For example, the principal at Southend received training but frequently missed

meetings whereas the Neighbortown principal attended meetings but had little prior knowledge of project activities. In both cases, the field agent had to lead the group through planning sessions.

Clerical support. Compensating for the lack of staff time and expertise was an unwelcome but obvious responsibility that someone had to assume. Not so obviously important was the performance of seemingly simple clerical tasks. Nevertheless, providing clerical services became an integral constituent of field agents' activities in sites where such services were not readily at hand. Field agents hardly considered locating equipment, arranging for coffee, obtaining copies of documents, and providing typing to be at the heart of facilitating school change. Yet before school staff could use information to make decisions, they had to have access to it; before they could practice observing classrooms on videotapes, they had to have TV monitors; and as teachers switched gears from a classroom's frantic atmosphere to the more sedate climate of a meeting, they welcomed a period of refreshments to pave the transition. In five sites (listed in Table 1), performing one or more of these clerical tasks became essential in smoothing the potentially rocky path to successful school change.

Staff Tension

Staff tensions became a second local condition which field agents had to face (second column of Table 1). The staffs in the 14 schools, like in most organizations, were not wholly united in the troublefree pursuit of a common goal. Instead, they were divided into factions which, in varying degrees, were at odds with one another. When overt tension between fac-

tions seeped into project activities, field agents altered certain aspects of the activities to reduce its effects.

At six sites, tension between teachers and administrators occasionally impinged upon the projects. When this happened, field agents intervened to keep the projects from grinding to a halt. Intervention generally consisted of mediating the conflict or, at a minimum, reducing its effects on the project. At Patriot and Suburban the agents had to go so far as to reshape the planning process in order to avoid tension-producing situations. Additionally at Patriot, the agent had to take over responsibilities earmarked for the principal.

Typically, tension-causing incidents surfaced outside project meetings and then threatened or directly constrained participation. For example, a Neighbortown teacher one day delivered a description of a classroom activity to the school office to be mimeographed. The principal saw the description, failed to see how it fit in with the class in which it was to be used, and subsequently questioned the teacher. The teacher responded angrily and complained to the field agent about the value of participating in the project if the principal was going to interfere with teachers' decisions.

At Patriot, the principal and a planning team teacher had a dispute about substitutes. The problem had been brewing for some time and came to a head just before a planning team meeting. The teacher was upset and visibly cried throughout the meeting. Other teachers on the team knew about the incident, and they all were extremely reticent to participate, particularly when the principal was present.

In both cases, the field agent had to soften the impact of the incident so that staff would continue to participate. At Neighbortown, the field agent was aware of the fact that the principal had been dealing with serious community relations that morning and explained to the teacher that because the activity in question involved a controversial issue, the principal may have thought that it was more threatening than it actually was. This interpretation of the principal's action mollified the teacher somewhat. In the Patriot case, at a break in the meeting, teachers complained to the agent that obtaining and orienting substitutes were chronic problems. They asked the agent to discuss this with the principal. The agent did so, and subsequently some adjustments were made to circumvent further conflict. Incidents like this at Patriot were frequent. Even when events ran smoothly, tensions bubbled under the surface often enough that the agent restructured some parts of the process to reduce the risk of conflict between the principal and the teachers. These changes diminished the school's overall responsibility for the project but, also, kept the teachers from withdrawing.

Staff Turnover and Disruptions to the Routine

Column three in Table 1 lists the schools in which field agents had to deal with staff turnover and periodic disruptions. The school year, indeed the school day, in many schools is laced with regularly occurring but unplanned incidents that significantly affect school operations. In working with schools, one learns to expect the unexpected. The exact nature of an event may not be predictable, but that something will happen to change anticipated circumstances is.

In five schools, disruptive events occurred frequently enough so as to dramatically alter the configuration of field agent activities. These incidents reshaped the cast of participants and key administrators with which field agents worked. At Patriot, Urban, and Riverside, field agents were never sure of the planning team's composition from one meeting to the next. To compensate for absences of key staff, agents often had to expand their process-helping activities. The agents at Patriot, Green Hills, and Middleburg had to respond to the turnover of staff in crucial administrative positions. Consequently, they found themselves repeatedly seeking endorsements for the projects to ensure a stable flow of resources.

Incidents at Urban and Riverside illustrate how quickly unexpected occurrences could shift project leadership responsibilities in a school. On one particular day at Urban, the field agent arrived for a planning meeting only to find that the teachers' union had hastily arranged its own meeting at the same time. With only a few participants in attendance, the prospects for sparking widespread discussion were dim. As a result, the agent had to dominate the discussion much more so than was intended.

Similarly, at various times, the agent at Riverside would find the project's local coordinator and/or regular classroom teachers absent. Low teacher attendance at meetings was largely the result of chronic staff absenteeism and a shortage of substitutes. In fact, on one occasion, a planning team member missed a meeting in order to fill in for the school secretary. The field agent, of course, knew to be prepared for any contingency and, typically, wound up directing planning meetings.

Field agents at Patriot, Green Hills, and Middleburg discovered that the need to obtain administrative endorsements for the projects frequently

went long beyond the period of initial entry. Administrative turnover in Patriot's district was particularly high. In the project's first two years, the district had three superintendents. The second was installed after the project had been in place for more than six months. Initially hesitant to continue it, the superintendent finally gave approval after several meetings with the field agent. However, this administration was a rocky one, and at the end of the school year, the superintendent resigned. Subsequently, a new round of obtaining project endorsements was begun.

Renegotiating endorsements was less successful for field agents at Green Hills and Middleburg, primarily because the administrators who left were the projects' key advocates. At Green Hills, the principal's replacement agreed to continue project-related activities but excused RBS from further participation. At Middleburg, the resignation of the district's curriculum coordinator weakened the principal's commitment to the project. In fact, the principal went so far as to initiate a competing school improvement effort and then explained to the field agent that the school could not afford to engage in two projects at the same time. Thus, the RBS project was dropped.

Expectations Derived from Previous Projects

The folklore surrounding in-service activities contains a myriad of stories about the faults and follies of experts--anyone "fifty miles from home." Whether based on myth or reality, staff attitudes place notable constraints on field agent activities. Such was the case in three urban schools; in the remaining schools, expectations did little to confine

agents' initial behavior, but played a powerful part in reinforcing the continuation of certain behaviors once exhibited.

For example, early in the Southend project, the principal took charge of at least two entire meetings. However, the principal's partial absences from subsequent meetings thrust leadership on the field agent. As time went on, the principal began to expect the agent to lead sessions more often. At Green Hills, the principal did not call on the agent to obtain typing services until after the agent had already performed this service as (the field agent thought) a one-time means of avoiding a planning delay. Thus, agents responded to contextual conditions and, then, site staff began to expect that response to be retained as part of the agents' repetoire.

At three of the urban schools, expectations loomed significant from the outset. Department chairpersons at Bigtown were regularly consulted on instructional matters before any kind of new program was established in their area. This led the principal to include them on the planning team. However, their interest was not in actually developing the program. What they expected was that others, especially the local project coordinator and the field agent, would develop proposals for their consideration and approval. Their insistence on participating in this limited advise and consent capacity obliged the field agent to organize a smaller work group to do the actual program development.

Staff at both Riverside and Urban openly resented outsiders who came in to help them. "[Outsiders] get a book out of it and give the school nothing in return," said one guidance counselor at Riverside. A teacher at Urban offered another reason for the existence of disparaging opinions of outside experts. "I don't want to give you a hard time but [our] depart-

ment has had 100 years of teaching experience on its staff...What can you tell us that we don't know," the teacher asked. Consequently, field agents encountered strong objections when they encouraged staff to participate. Indeed, initial planning activities got off to a slow start and picked up only after the field agent had attended to teachers' questions, concerns, and complaints.

School Reactions: Flexibility and Effectiveness

This chapter began by contending that effective field agent behavior is the result of adapting agent actions to a school's context. Because local conditions differ among schools, behavior that is effective in one site may not be in another. Subsequent sections showed how field agents adjusted their behavior to counterbalance, compensate for, or accommodate to barriers to school change at different sites. Empirically it would be desirable to examine whether school change was ultimately more successful at a school where an agent matched his or her behavior to the site than where an agent did not. Realistically, though, it must be recognized that an individual's impact on a school is muted by the attitudes, beliefs, and actions of other school members as they pursue their own purposes. Indeed, the remainder of this volume pays increasing attention to the school as the primary determinant of change project outcomes. The importance of field agents resides not in their influence on final outcomes but in their ability to keep the process moving and to create conditions that increase the probability that the process will lead to the attainment of desired objectives.

School staff attested to field agent flexibility as helping to achieve these more intermediate outcomes:

> A large amount of the success of the project had to do with the field agent's ability to manage interpersonal relationships at all levels of the district. (from a Patriot teacher)
>
> The field agent got teachers with a negative attitude and helped turn that around. (from a Riverside teacher)
>
> The field agent understood us and did not push us. (from the Suburban principal)
>
> In the beginning I was concerned. I felt that we wouldn't be using the field agent's expertise...but it didn't take too long for the field agent to see the field agent had to be involved. When the field agent became involved, the project took off. (from a Neighbortown teacher)

The above, of course, refer to instances where field agents went beyond what they had initially intended to do at a site. In schools where local staff assumed primary responsibility for leading a project, the agent's willingness to remain in the background was also noted and appreciated:

> The leadership for the project was definitely from the school. When we did come up to a brick wall, RBS helped. The assistant principal did a heck of a job and was responsible for keeping it going....The field agent was a good motivator and a tremendous resource. (from an Oldtown teacher)
>
> If we needed help and RBS was not here, there were people here trained. (from a Smalltown Elementary teacher)
>
> RBS got us started; I led it. (from the Smalltown Middle assistant principal)

Interestingly, the major concern schools had about field agents was how much direction the agent provided for the project. One might expect that the schools would have jealously guarded their sovereignty over a project and that field agents would have had to tread carefully to not appear as if they were taking too much control. In fact, the opposite

seemed to be true. No one really complained about too much field agent influence, but several participants did express the desire for more direction.

> The principal thinks that perhaps the field agent should attempt to be a little more directive. For one thing, the members of the planning team do not know the field agent. They need to be shown that the field agent does have a lot of background knowledge and expertise; that the field agent is a capable leader.
> (from the Bigtown fieldworker's notes)

> We needed more structure at first. Before RBS provided direction, we floundered. Finally, RBS began sharing information....They made subtle suggestions and nudges.
> (from a Farmcenter teacher)

Or, recalling the Southend principal's words,

> One cannot run an inservice and take care of everything else. What I need is for someone else to come in and do it.
> (from Southend's principal)

Summary

Agents are effective to the extent that they mold their activities to site conditions. This means occasionally expanding their responsibilities, adjusting the process, providing clerical services, obtaining re-endorsements, and mediating school tensions. Rigid adherence to preconceived notions of appropriate behavior may actually work against school change.

Several additional lessons may also be drawn from this chapter. Consider the following:

- A process-helping field agent is likely going to have to increase his or her responsibility for leading a project, especially if principals are the major contact people.
- The timing of project activities to fit with school seasons is important. Otherwise, the process may have to be adjusted significantly.
- The planning process may increase opportunities for already-existing tensions to surface. A field agent may have to sacrifice some planning precepts for peace.

- School life is routinely disrupted. A field agent should not count too heavily on certain conditions being present for any particular activity. A plan for all, or at least some, contingencies is necessary.

- With respect to how school expectations typically reinforce field agent activities: a field agent should not do something once, if he or she is not willing to do it again.

CHAPTER IV

The Change Process: Sequential Planning

"Goals," "objectives," "needs assessment," and "problem solving" are all familiar terms to field agents. Generally the terms connote efforts to increase the rationality of planning activities. That is, their purpose is to optimize reasoned attainment of some desired goal. Thus, the process of decision-making typically involves some variation of carefully considering what the goals of a school should be, identifying the ones that are not being met satisfactorily, and selecting methods for addressing the most important.

Many researchers, including Lindblom and Cohen (1979) and Thompson (1967), say that organizational decisions are seldom completely rational. Decision makers are not likely to have thorough knowledge of all relevant variables, to consider all of the potential decision alternatives, or to be free of influence from external factors, such as community pressures or political uncertainties.

Clark (1981) makes a similar argument in the case of schools. To be sure, developers of sequential planning procedures acknowledge that decisions will not be totally based on rational considerations. Nevertheless, at a minimum, they believe that orderly collection of data and deliberation about what the data say should help discipline decision making, and thereby enhance the quality of plans. That this belief is widely held in education is reflected in the numerous school improvement projects which rely on variants of sequential planning (e.g., school improvement programs in California, Pennsylvania, and Virginia).

This chapter is about the use of sequential planning in the RBS projects. The extent to which groups went through the process and made decisions on the basis of prescribed information varied from school to school. Often, this depended upon local conditions, particularly the availability of resources, accustomed decision-making practices, compatibility between school and project priorities, and school factions. First, the chapter briefly discusses the pervasiveness of sequential planning models, the reasons why people support such models, and the way in which the RBS projects used sequential planning procedures. Then, it traces how school contextual conditions interacted with the planning process. The chapter concludes by suggesting tactics to help field agents reconcile inherent differences between sequential planning and local conditions.

The Pervasiveness of Sequential Planning

Sequential planning procedures are built into many models or approaches described in the literature on educational innovation and curriculum development. For example, the problem-solving (Paul, 1977) and linkage (Havelock, 1973) approaches to school change both include identification of problems or needs, selection of solutions from various alternatives, and implementation of the solutions. Systematically collected data help identify needs and select alternatives most likely to be effective. The authors of classic works on curriculum development (e.g., Smith, Stanley, and Shores, 1957; Taba, 1962; and Tyler, 1949) view sequential planning as a process that includes considering the goals or directions of education, assessing their attainment, and judging how they can be met most effectively.

Researchers have duly noted that planning is seldom as rational as it is intended to be (Allison, 1971; Berman, 1981; March and Simon, 1958; Paul, 1977). For example, a decision to adopt an innovation is sometimes more opportunistic than it is a carefully thought-out response to an identified need (Greenwood, Mann, and McLaughlin, 1975). At other times, curriculum decisions may be made informally and piecemeal without careful consideration of alternatives and consequences (Kirst and Walker, 1971). If, and how, a sequential planning process is used may be influenced by the availability of release time for teachers (Rosenblum and Louis, 1981), the ambiguity of educational goals and the difficulty of assessing their attainment (Miles, 1981), the existence of relatively autonomous subunits with competing needs and interests (Rosenblum and Louis, 1981), and community controversy or antagonism (Paul, 1977). In general, there is growing recognition that the assumptions underlying most approaches to sequential planning do not adequately reflect the reality of educational organizations (Clark, 1981).

Perceived Advantages of Sequential Planning

Supporters of sequential planning strategies point out several advantages. First, sequential planning leads to the selection of changes that are appropriate and feasible for a particular setting because decisions will have been made on the basis of perceived local needs and priorities. People who are familiar with a setting will have considered several alternatives before selecting the areas which they consider best to address. Second, the rational planning process helps to develop support for and commitment to the changes selected. During the group's decision-making

process, consensus building will have likely occurred. This reassures members about the soundness of their decision and commits them to carrying out the innovation (March and Simon, 1958; Paul, 1977). Third, participants are less likely to discontinue using the innovation after initial incentives are withdrawn (Zaltman, Florio, and Sikorski, 1977). The reason they implemented a change in the first place was that they believed it would improve instruction, not because someone else offered a temporary incentive. Fourth, the process of comparing desired goals with current conditions helps overcome a natural resistance to change by convincing participants that their present situation is unsatisfactory (March and Simon, 1958; Zaltman, et al., 1977).

Sequential Planning in the RBS Projects

This section describes how the sequential planning process was applied to basic skills, career education, and citizen education. The basic skills approach involved training participants to collect data on classroom practices; comparing classroom data to research-base data and setting improvement goals; selecting strategies to address those goals; planning implementation; deciding how to evaluate the changes; and implementing the strategies. Information from each phase of the process was to be used in the next phase.

The career education approach included identifying program goals; conducting needs assessment surveys of faculty members, community members, and students; identifying resources available in the school and community; identifying priority goals to be implemented; designing a program; implementing it; and evaluating it.

The citizenship education approach was similar. It had three phases. The first phase consisted of nine "tasks": organizing a school improvement team, orienting it, establishing goals for citizen education, identifying sources of data and instrumentation, setting performance criteria, observing citizen education behaviors, assessing observational results, refining performance criteria, and developing a formal needs statement. The second phase used information from the first phase in program development and implementation. The third phase focused on program evaluation.

The degree to which schools adhered to the sequential processes varied. Table 2 summarizes planning characteristics at each site, along with the local factors which influenced them. The table shows whether the planning group (1) carried out all stages of the planning process and (2) allowed the process to guide their decision-making behavior. The first set of characteristics indicate whether the process was followed at least until decisions about what changes to implement had been made. Obviously a planning procedure cannot be expected to affect implementation if those using it never reach the final step of deciding what to implement. The second set of characteristics is important because a group cannot be considered to have really used a particular planning process if its decisions were not based on data or were not made at an appropriate time. The planning procedures were to give participants a framework for making their decisions. If they made decisions without paying much attention to the process, it can be said that they used the process ritualistically and were not much influenced by it.

Table 2. Summary of the Nature of the Sequential Planning Process and Local Conditions

Site	Project	Nature of Sequential Planning Process	Factors that Facilitated Planning	Factors that Interfered with Planning
Middleburg	Basic Skills	Process discontinued before commitment of specific changes Suggested changes vetoed by administrator	Resources available to hire substitutes Project and school goals compatible	Initial incentives for participation ended School adopted new program viewed as incompatible with project
Middletown	Basic Skills	Process enacted except for wrap-up meetings Some changes implemented prematurely	Resources available to hire substitutes Project goals of high priority to school	Time demands considered too high Ordinary knowledge commonly used to made project-related decisions
Patriot	Basic Skills	Process enacted Data collection procedures altered Some changes made without being identified as important by data	Resources available to hire substitutes Project and school goals highly compatible	Time demands considered too high Substitute teachers perceived as incompetent Factions existed between staff and administrators Teachers used ordinary knowledge to identify problems rather than the planning process; also, some major problems beyond scope of innovation
Smalltown Elementary	Basic Skills	Entire process enacted	Project and school goals compatible Teacher evaluation system used to provide incentives Staff time available	

Table 2. Summary of the Nature of the Sequential Planning Process and Local Conditions

Site	Project	Nature of Sequential Planning Process	Factors that Facilitated Planning	Factors that Interfered with Planning
Smalltown Middle	Basic Skills	Entire process enacted	Project and school goals compatible Teacher evaluation system used to provide incentives Staff time available	
Southend	Basic Skills	Entire process enacted	Project and school goals compatible Teacher evaluation system used to provide incentives	Time demands considered too high, especially in second year
Bigtown	Career Education	Entire process enacted	Initial planning team members had light teaching loads Resources available to hire other teachers to write implementation plans Staff member available with time and incentives to pursue career education State mandate to implement career education	Project and school goals not highly compatible
Green Hills	Career Education	Entire process enacted Scope of planned changes limited New principal negated process decisions	Separate resources available to support development of specific implementation plans	Protoring arrangement aroused resistance among non-participants Innovation goals given low priority, threatened other goals

Table 2. Summary of the Nature of the Sequential Planning Process and Local Conditions

Site	Project	Nature of Sequential Planning Process	Factors that Facilitated Planning	Factors that Interfered with Planning
Neighbortown	Career Education	Entire process enacted Scope of planned changes limited Goal priorities not used in implementation plans	Separate resources available to support development of specific implementation plans	Administrators not willing to use resources to pay teachers for after-school project work Project goals given low priority, threatened other goals
Oldtown	Career Education	Revised planning process enacted	State grant provided resources to enact process, and obligations to do so State mandate to implement career education	Other time demands distracted key person from project initially Project goals given low priority initially
Farmcenter	Citizen Education	Entire process enacted Low-intensity changes recommended	Staff time to participate available	Resources not available to support later process enactment Project and school goals not highly compatible
Riverside	Citizen Education	Process discontinued before implementation plans made		Resources not available to support process enactment Project and school goals not highly compatible Factions between teachers and administrators and teachers and students delayed progress RBS assistance reduced before implementation plans completed

Table 2. Summary of the Nature of the Sequential Planning Process and Local Conditions

Site	Project	Nature of Sequential Planning Process	Factors that Facilitated Planning	Factors that Interfered with Planning
Suburban	Citizen Education	Process discontinued after needs assessment stage		Resources not available to support enactment Project goals of low priority in school Project goals threatened system goals by impringing on non-participants RBS assistance reduced before implementation planning completed
Urban	Citizen Education	Process discontinued before implementation plans made		Resources not available to support enactment Project goals of low priority in school Factions delayed progress during meetings RBS assistance reduced before implementation planning completed

Local School Conditions and Sequential Planning

Several factors explain why some schools were able to work through the sequential process and make their decisions fairly easily and some were not. First, securing necessary resources, particularly the time participants needed to meet with one another, was highly problematic in some schools. This seriously affected the relative emphasis given to different activities in the planning sequence. Second, in making innovation decisions, participants sometimes continued to use the ordinary, or commonsense, knowledge that steered their everyday practice rather than using knowledge from the planning process. Teachers, especially, seemed to view more scientifically-based knowledge in the same way Waller (1967:3) regarded sociological thought in his day, "A sociological writer cannot, in the present state of our science, hope to get very far ahead of common sense, and he is usually fortunate if he does not fall behind it." Third, the compatibility between school and project priorities varied considerably. When they were incompatible, people were less willing to devote resources to planning or consider changes as extensive as those suggested by the process. Fourth, factions within some schools made it difficult for groups to conduct reasoned discussions or to cooperate in planning efforts. RBS' own involvement in the projects was still another factor that influenced how planning proceeded. When RBS assistance was withdrawn before participants reached the point of deciding what changes to implement, they were unlikely to continue the process themselves.

School Resources

The sequential planning process made huge time demands on school staff. Each step took many hours to complete, pulling teachers and administrators away from their regular duties. Indeed, the time that it took to (1) discuss and agree on definitions and goals, (2) develop, administer, and analyze needs assessment results, (3) establish goal priorities, (4) learn to conduct classroom observations, (5) observe instructional lessons, (6) complete forms specifying the contents of curricula and achievement tests, and (7) interpret data consumed time teachers normally set aside for classroom clerical chores.

More time to plan was available in some sites than others. In most schools where the majority of participants had regular classroom teaching assignments, time for project activities was particularly limited. School personnel without teaching assignments or with lighter work loads were able to adjust their schedules more readily than teachers and could attend meetings free of the need to call in substitutes. Some could absorb process tasks into their regular duties. At least one participant in most schools was either an administrator, a guidance counselor, or a specialist. Because of their more flexible schedules, these people sometimes assumed key roles in the project by making logistical arrangements for meetings and other activities. For example, at Bigtown, the site coordinator was an administrator whose primary responsibility was career education, the focus of the project. Moreover, most other Bigtown participants were department chairpersons, building or district administrators, and specialists who could also attend meetings relatively easily.

Monetary resources were important to helping schools cope with time requirements. For the most part, funds made it possible to hire substitute teachers. As in the case of time, availability of funds varied among schools. Only two schools, Patriot and Middletown, were able to hire substitutes to release teachers for all project meetings. The Patriot funds were supplied by the school district; the funds used in Middletown were secured by a intermediate service agency (ISA) from the state department. Limited monetary resources were available in eight other sites (all except Farmcenter, Suburban, Riverside, and Urban) to occasionally hire substitute teachers or pay participants for project activities.

When monetary resources were not sufficient to hire substitutes, other arrangements were made to release teachers from regular responsibilities. One type of arrangement involved asking non-participants in the school to proctor participants' classes. This occurred at both Green Hills and Neighbortown. A second type of arrangement was to either schedule project meetings during periods when several participants had no teaching assignments or, conversely, select participants according to who had free periods when project meetings were scheduled. A third type of arrangement was to hold meetings after school. Occasionally some combination of the above was used.

Meeting the resource requirements of the sequential planning process had several side effects on how a planning group went through the sequence of activities. One of these was that project resources, primarily money and time, would sometimes be consumed before participants had a chance to discuss or implement new practices. When this happened, field agents would have to compress those stages. Participants viewed this as unfortunate

because, to them, these stages were the most useful portions of the process, especially given the limited time teachers normally have to share ideas with one another. At Middletown, for example, approximately five meetings were devoted to procedures for conducting observations and analyzing data; only two were spent in discussing implementation strategies and deciding which new practices to implement. This happened because by the time the group had reached the point of considering new practices, field agents had become aware that resources would likely be depleted soon, and so, accelerated the process.

Current Decision-Making Practices

Using a sequential planning strategy to decide what changes to implement required participants to depart considerably from their usual modes of behavior. Although participants were familiar with the process of identifying a problem, considing alternatives, and selecting the most effective or feasible for implementation, in practice such decisions were apt to be made informally and privately. Furthermore, people were more likely to turn to common-sense knowledge rather than to systematically-collected information to make classroom decisions. Consequently, their decisions and behavior were often influenced more by familiar patterns of behavior than by planning activities. In addition, participants sometimes implemented changes individually before the group as a whole had reached the stage of deciding what changes to make.

The distinction between the common-sense knowledge that participants were accustomed to using and the more systematically-collected information of the planning process is similar to the distinction between "ordinary"

and "scientific" knowledge (Campbell, 1974; Schuetz, 1953). People accept ordinary or common-sense knowledge as true without evidence that it was systematically generated or validated. Such knowledge is usually gradually assimilated through experience or prescriptions for effective professional practice (for example, "tell students immediately what you expect of them" and "don't smile until December"). Scientific knowlege, which has also been labeled "professional social inquiry" (Lindblom and Cohen, 1979) and "research-based knowledge" (Louis, 1981), refers to knowledge generated through or otherwise used in the planning procedures--for example, data from the career education and citizenship education needs assessments, the basic skills research base, or time-on-task observations. The terms "procedural" and "process" are used here to refer to that type of knowledge.

Ordinary knowledge, of course, will be used to some extent at virtually all stages of any planning process. It will play a role in establishing objectives, designing needs assessments, and developing implementation plans. Ordinary knowledge that is of particular interest here, however, is that which modified or replaced procedural knowledge, either during the designated stage of the process or before it.

When teachers at Patriot selected strategies for increasing time-on-task, they used their ordinary knowledge to adjust the observation data. The data showed that most student off-task behavior was in the management/transition category. However, teachers decided that improving discipline (which the data indicated was a lesser problem) would increase time-on-task more than reducing management/transition time. The teachers had long believed that lack of discipline was the most serious problem in the school.

Some participants reasoned that transition from one activity to another took more time than it should because students misbehaved.

Participants also used their ordinary knowledge to decide whether or not to use research knowledge presented by field agents. Basic skills field agents distributed research summaries to help participants select strategies to increase time-on-task. One of these findings that field agents and participants mentioned repeatedly in meetings was that time-on-task was higher during large-group instruction than during small-group or individualized instruction. Some teachers changed their grouping patterns accordingly; many others did not. The latter teachers continued to believe that individualized and small-group instruction was better.

Ordinary knowledge also led participants to make decisions and implement changes before process data were available and the designated process stage was reached. The process specified that participants were to decide what classroom changes to implement either after doing observations and analyzing the data or after assessing needs and assigning priorities to goals. However, teachers sometimes implemented changes before either of the activities had taken place. Participants in the basic skills projects identified changes that would increase time-on-task throughout the process, even during the earliest stages. One Middletown teacher said that while looking at videotapes used for observation training, the realization struck that a lot of learning time was wasted when students waited in line to see the teacher, receive or hand in assignments, or be dismissed. Other teachers commented that they became aware of strategies for reducing transition time when they informally exchanged ideas during training, saw strategies used by other teachers, and listened to the comments and

suggestions of people who observed their classrooms. The teachers saw little reason to wait weeks, or months, until the designated stage of the process to implement changes they thought would increase time-on-task and improve classroom atmosphere.

On the other hand, some participants did nothing independently of the process. They made few classroom changes before the group had reached the designated stage and they made greater use of procedural knowledge to make decisions. Most of those teachers were in the career education projects.

These differences in the two projects appeared to be primarily due to several factors. First, basic skills participants were experienced at making decisions about instruction in math and reading. Many career education participants were unfamiliar with the concept of career education; their ordinary knowledge was not adequate to make decisions or stimulate implementation. While the early process stages gave teachers some ideas about implementation, these notions were not well formed.

Second, incentives for implementation were high for teachers in the basic skills projects but low for teachers in the career education projects. In the career education projects, teachers perceived few rewards for implementation aside from the motivational value of doing something different. They also faced a few disincentives in the form of non-participating colleagues who might disapprove if participants spent class time on career education at the expense of regular subject matter content.

Third, career education implementation required considerable effort. Teachers had to locate or write career-related activities and then prepare them for presentation to students. Implementation of the basic skills changes required relatively little preparation; they easily meshed with

already ongoing practices. Moreover, most of the career education activities would be used only once with a particular class; the basic skills strategies improved classroom conditions over a long period of time.

School and Project Priorities

How the sequential planning process was carried out was sometimes constrained by competition between project and other school priorities. Other priorities interfered with the process more in the career education and citizenship education projects than in the basic skills projects where there was generally high consensus about the importance of the project goals. Differences also occurred across organizational units of schools. Some departments in secondary schools had less comprehensive, highly structured curricula than others and were more willing to work toward project goals.

Sometimes conflict between project and school priorities limited the scope of changes decided upon, even when data suggested more ambitious changes were needed to meet project objectives. For example, participants in Neighbortown and Green Hills avoided changes that might jeopardize coverage of content area topics. Participants decided to "infuse" career education into content areas rather than replace content-area curricula with career education materials. Other methods of addressing career education goals included adding courses and sponsoring special activities such as resource centers. These methods also did not interfere with coverage of the content areas.

Priorities regarding relationships between school and community interfered with change decisions in two sites. Participants in Green Hills and

Neighbortown wanted to plan career education activities that would involve the community--by sending students out into it and bringing its members into the schools. However, administrators were afraid this would arouse community resistance to the project and vetoed it.

Conflicts with other school priorities also limited the amount of time and other resources allocated to carrying out the process. In two cases, project planning was affected by administrators trying to maintain harmony among staff. The principal at Suburban sometimes truncated project activities to reduce resistance from non-participants. They had been asked to donate planning time to help construct the needs assessment; some resented that and reported it to the local teachers' association. When substitutes were not available at Patriot, the principal reduced project meeting time rather than ask other teachers to cover for participants.

In one site, Green Hills, all stages of the sequential planning process were carried out but final change decisions were rescinded by a new principal who wanted to address other priorities. Furthermore, the project had aroused resistance among non-participants, partly because of the attention it was given, and the principal wanted to defuse that resistance in order to establish a good relationship with the faculty. Career education could not be totally discontinued, however, because the central office said that a program should be developed. The principal decided to meet that mandate expediently so that time could then be devoted to other goals. This was done by discontinuing the ongoing effort (including the sequential planning process, RBS' involvement, and the planning team) which the principal perceived was delaying progress, and by assigning the task of writing career education curriculum materials to members of a faculty council.

The influence of other goals and priorities on how the process was carried out was sometimes tempered by the availability of incentives. One school had an employee whom district administrators expected to develop a career education curriculum. The project goals were, of course, quite compatible with the employee's. The person not only needed to develop a curriculum, but also sought the kinds of assistance RBS offered. As a result, the person was willing to devote a great deal of time to sequential planning.

That district and another were located in a state where, during the course of the project, the SEA mandated career education. This heightened the importance of career education goals. The mandate, then, facilitated the process by boosting the priority of career education as a system goal.

Factions

Factions within school faculties and between teachers and administrators can have many effects on the planning process. Competition for resources or recognition, for example, can easily thwart cooperative efforts. Some of the effects of within-school tensions on the RBS projects have already been described. Tensions between participants and non-participants sometimes made the former hesitant to devote time to the process or to attempt changing regular content-area curricula. Fear of provoking tensions sometimes led administrators to limit project efforts. By and large, though, these tensions were minor and were created by the projects; this section is primarily concerned with school factions that existed before a project was introduced.

In Riverside and Urban, both urban secondary schools, factions frustrated sequential planning. These factions had developed and gained strength as the schools underwent strikes and teachers found ways to deal with administrators they viewed as weak. Consequently, in both schools, it became a struggle to enlist participants willing to exert the effort required to carry out the process. Also, discussions of program philosophy and goals were frequently reduced to opportunities for people to vent frustrations. These, in turn, led to heated arguments about the school in general rather than reasoned discussions about the specific school improvement project at hand.

Factions between teachers and administrators (both at the school and in the central office) at Patriot diluted the emphasis given to certain process activities. Administrators had originally planned to help conduct classroom observations. However, teachers would not tolerate them in that role and chose, instead, to observe one another's classrooms. With less time available for observations, fewer were conducted. That may have weakened the reliability of the data used to make decisions.

A Note on Continued Assistance from RBS

The sequential planning process was also influenced by the continuation of assistance from RBS employees. In several sites, RBS assistance was seriously curtailed or completely withdrawn before the process had been put into full operation. Because field agents provided several kinds of assistance during the process (Chapter III), some schools became highly dependent on them. When their assistance was cut short or eliminated somewhat abruptly the process was unlikely to continue.

RBS assistance was withdrawn in three citizen education sites--Urbar, Riverside, and Suburban--before participants were able to decide what changes to implement. None of those sites completed the process. In each, serious impediments to planning existed. Resources to support the process were not available in any of the sites; the project goal, citizenship education, was of relatively low priority; factions existed among faculty members and between them and administrators; in addition, there were few incentives for continuing the process. Thus, without the constant urging and encouragement of field agents, the projects fell by the wayside.

Field agents in citizen education also withdrew their assistance from their fourth site, Farmcenter, but there the process continued. Farmcenter shared some, but not all, of the problems of the three other sites. Few resources were available to facilitate planning and the project's major goal was of relatively low priority. However, factions were not a serious problem in the school. More importantly, the principal had a keen interest in the project and scheduled time for project-related activities. Finally, the planning process had progressed further there at the time that RBS had to withdraw. Planning teams had already begun to discuss what changes to implement and, therefore, had less to do to complete the process.

RBS assistance also ended in a fifth site, Middleburg, before planning had been completed. However, the decision to discontinue the project at this basic skills site was made by site participants rather than by RBS. The process was not, of course, continued there.

Implications

From the preceding discussion, it is clear that uninterrupted sequential planning is more possible in some schools than others. Factors that influence the sequencing of planning activities or the extent to which planning activities guide decisions include the availability of resources, the current practices of participants in making classroom decisions, the compatibility of school and project priorities, and the existence of factions within schools.

Although the barriers facing projects that use sequential planning are considerable, field agents can do much to help planning groups carry out the process successfully. If they are alert to the potential influences of local school conditions, field agents can construct ways to counteract them. Strategies for reducing the influence of resource availability include:

- Obtaining resources to pay substitutes or otherwise release or remunerate teachers.
- Seeing that meetings are scheduled well in advance so that substitutes can be obtained and arranging for the same substitutes to work in the same classroom each time.
- Avoiding frequent meetings when people are busy with other activities.
- Intensifying the process during its early stages, allowing participants to see progress while they are still enthusiastic.
- Avoiding spending too much time on particular portions of the process and making it necessary to slight other portions.
- Eliminating or drastically reducing tasks that are of marginal utility.

To reduce the influence of current decision-making practices field agents can:

- Give participants the opportunity to make reasoned decisions early in the process. If some people perceive a need for and want to make changes before the designated stage of the process, discuss their perceptions of conditions, needs, and changes which might be made tentatively until the data are available.

- Minimize the amount of time it takes to acquire data. Avoid lengthy preparation processes for data collection and long delays before data are available for use.

- Make sure that people are comfortable with the information on which they are to base decisions: Do they understand it thoroughly? Is it credible to them--accurate, representative, a valid indicator of an important construct?

- Legitimize the use of other information in decisions. After the data are available, discuss whether or not people think it is worthy of use in decision-making and what other factors need to be considered.

Suggestions for reducing the influence of competing school priorities include:

- Establishing school and project goal compatibility at the beginning of a project and selecting innovations and schools partially on the basis of goal compatibility. If project goals are of low priority in comparison to other school goals, make sure that administrators are committed to the project and that other staff are aware of that commitment.

- Identifying individuals for whom project goals are most important and recruiting them as early supporters.

- Monitoring effects of the planning process on the school and adjusting the process when it impinges on the operation of the remainder of the school.

- Looking for ways in which the process can address important school goals--e.g., help meet a new state mandate or community concern--and bring that to people's attention.

Developing a similar list of recommendations to minimize the influence of factions is difficult. Field agents can use group process techniques and, to the extent they consider wise, follow some of the suggestions listed below. However, openly discussing conflicts and grievances can have

negative as well as positive effects. Field agents must judge which effects are likely to result.

- Structure discussions which involve issues likely to aggrevate group frictions so that concerns can be aimed but will not altogether block further planning.

- Avoid overrepresentation of a single faction so that others will not identify the project solely with them.

- Work behind the scene to obtain information on what causes tension in a school and take this into account when planning meeting activities.

- Meet privately with faction leaders to address questions they have about the project and how the project may help professional concerns they have.

CHAPTER V

The Change Process: Local Participation

It has become customary to involve teachers who will implement an innovation in its early planning stages. Such involvement was stimulated by applied research conducted in the 1930s and 1940s (Coch and French, 1948). Since then, it has become pretty much the rule, boosted by a Rand Corporation report (Berman and McLaughlin, 1977), that teacher involvement is a critical factor in the successful implementation and continuation of innovations. According to the Rand study, teacher involvement enhances local commitment and motivation as well as builds capacity to use an innovation. It also ensures that the innovation will be appropriate for the local setting.

Despite the apparent benefits of local participation, there are still some situations where its costs may hamper success. Participation diverts staff time and energy from regular duties. If demands are high and either the payoff is not easily visible or regular responsibilities suffer, then local commitment, capacity, and adaptation may never occur. Thus, field agents must constantly balance the costs of participation with the benefits.

In fact, teacher participation may not be a realistic expectation in all schools, or at least not in the same form. The extent to which people are willing and able to become actively involved in educational innovation is influenced by several local school conditions: the availability of resources, incentives and disincentives perceived by participants, and school tensions. Resources, such as staff time to plan or money for hiring substitutes, constrain the number of people who can be involved and for

what length of time; incentives and disincentives affect people's willingness to shift their energy to a project; and tensions can create a meeting atmosphere that is counterproductive to planning, thereby discouraging some staff from becoming involved.

Field agents can adjust the planning process to minimize the effects of these contextual factors. One adjustment, for example, might be to establish multiple planning groups to perform specific tasks or serve particular functions. This reduces demands on individual teachers and allows planning to proceed more efficiently. Other adjustments might include reducing or eliminating certain tasks, shifting tasks to someone with a more flexible schedule, and obtaining funds to pay substitutes or remunerate teachers.

This chapter explores the factors that influenced teacher participation in project planning groups. It also looks at how well such participation met its objective of building local commitment to change. First, though, there is a brief review of the literature on the rationale for participation and its nature in the RBS projects. Then, after tracing the influences of local conditions on participation, the chapter discusses process adjustments that reduced the influence of the factors. Finally, there is an examination of the influence of those adjustments on the effects of participation.

Why Encourage Participation?

The term participation refers here to formal opportunities for teachers to be present during the process of making decisions about school improvement (Firestone, 1977). The extent to which participants actually

influence decisions can vary substantially. People may (1) simply provide information which others will use to make decisions, (2) voice opinions and make recommendations--which may or may not be taken into consideration, (3) vote upon or veto decisions suggested by administrators, or (4) make decisions with no distinction between themselves and administrators (Dachler and Wilpert, 1978; Devlin, 1981; Giacquinta, 1973). The scope of these decisions can vary from minor changes in a teacher's own classroom to major school-wide policy changes. Here, participation refers specifically to the work of RBS project planning teams. The task of those teams was to develop innovation plans.

The literature contains three major underlying reasons for involving local participants in planning. First, participation increases people's commitment (or at least willingness) to spend the time and effort required to implement new practices and to continue them after initial incentives are withdrawn (Berman and McLaughlin, 1977; Firestone and Corbett, 1979). Those who help plan an innovation are likely to develop psychological ownership of it and to persevere rather than waste the resources already invested in it (Bartunek and Keys, 1979; Mann, 1978). The group setting of participation can reduce resistance and generate a sense of public commitment to an innovation(Havelock, 1973; Katz and Kahn, 1966).

Second, participation helps develop local capacity for implementation; that is, people will acquire the knowledge and skills needed to change their behavior (Gross, Giacquinta, and Bernstein, 1971; McLaughlin and Marsh, 1978). They are more likely to thoroughly understand a program when they are exposed to its developmental process and know the reasons that led to certain decisions. Furthermore, they may have an opportunity to receive

technical assistance from external experts and to have blocks of time specifically allocated to developing knowledge and acquiring skills.

Third, local participation in project planning heightens the possibility that an innovation will be appropriate in a particular setting (Bartunek and Keys, 1979; Berman and McLaughlin, 1977). Teachers tend to know more about a setting, its needs, and the kinds of changes that are most feasible in it than external experts. Even if an innovation has been partially developed in advance, teachers can provide feedback and suggest corrections or modifications (Berman, 1977).

Research on participation has been less clear about its effects. Some reviewers of the literature say that participation indeed helps create commitment and ownership (Havelock, 1973; Paul, 1977). Others, however, claim that research findings are generally inconclusive (Fullan and Pomfret, 1977; Giacquinta, 1973). Suggested explanations for the different findings are that (1) the studies used varied or unclear definitions of participation and different methodologies and (2) reviewers used different literature bases and examined the literature from different perspectives (Felker and Davis, 1979; Giacquinta, 1973).

One reason for the inconsistency of research findings about participation may be that its effects, as well as the extent to which it can be carried out, vary among settings. However, relatively little is known about this issue. For example, some researchers (e.g., Sieber, 1981) have noted that participation is very demanding on resources, but they have not dealt with the implications of this for schools with different amounts of resources. This chapter argues that school context has significant effects on participation and its intended benefits. More specifically, it examines

(1) how the availability of resources, incentives and disincentives, and interpersonal tensions influenced the nature of participation and (2) whether participation led to the development of a strong commitment to the innovation process and the resulting changes. The other two often-stated benefits of encouraging participation, building capacity and tailoring the innovation to a site, were more difficult to assess precisely and, thus, receive only brief attention here.

Participation in the RBS Projects

Soon after the project was initiated in each school, administrators designated a planning team, either by appointing participants or asking for volunteers. Members of the team were to attend project meetings and conduct planning activities; through these activities they would develop a new program. Team members included classroom teachers, administrators, other school and district personnel (e.g., guidance counselors, and curriculum specialists), and sometimes community members or students. Meetings were held during or after school and varied in length from less than one hour to an entire day. Classroom teachers were able to attend school meetings held during the school day because substitutes or colleagues covered their classes or because meetings occurred during planning periods. Table 3 describes the planning team in each school and its meeting arrangements.

The methods used to develop innovation plans and the activities of participants varied across the three RBS content areas (Dawson, 1981). In the career education and citizen education projects, teams initially worked in groups as they went through a sequential planning process. This process

Table 3. Planning Team Size, Composition, and Meeting Arrangements

School	Number of People on Team	Composition of Initial Planning Team	Time of Meetings	Duration of Meetings	Arrangements for Teachers to Attend In-School Meetings
Middleburg	10	7 teachers, reading specialist, principal, district-level supervisor	during or after school	70 minutes to all day	substitutes hired--money from intermediate agency
Middletown	9	6 teachers, reading specialist, counselor, principal	during school	half day or all day	substitutes hired--money from intermediate agency
Patriot	5	4 teachers, principal	during school	half day or all day	substitutes hired--money from district; when subs unavailable, others covered classes or meetings shortened
Smalltown Elementary	7	4 teachers, specialist, assistant principal, principal	during or after school	one hour to all day	substitutes hired--money from other special projects
Smalltown Middle	6	4 teachers, assistant principal, principal	during or after school	one hour to all day	substitutes hired--money from other special projects
Southend	4	3 teachers, principal	during or after school	one hour to all day	substitutes hired--money from other special projects
Bigtown	13	1 teacher, 4 dept. chairpersons, counselor, career ed coordinator, principal, asst. supt., 2 students, teacher from a feeder school, community members	during school	one-two hours	most were chairpersons with released time
Green Hills	13	4 teachers, counselor, principal, ass't supt., community members	during school	one-three	non-participant proctors
Neighbortown	8	2 teachers, counselor, principal, ass't supt., student, community members	during school	two hours	non-participant proctors; some substitutes used

School	People on Team	Composition of Initial Planning Team	Time of Meetings	Duration of Meetings	Arrangements for Teachers to Attend In-School Meetings
Oldtown	9	3 teachers, counselor, vice-principal, principal, 2 district-level employees, community member	during school	All day	substitutes
Farmcenter	At least 12	at least 4 teachers, 3 students, guidance counselor, ass't principal, principal, 2 or 3 parents. Also, several reps of community agencies attended meetings; team status unknown.	during or after school	80 minutes-2½ hours	unknown for in-school meetings
Riverside	More than 10 at each meeting	"Team" not specifically identified; meetings attended by 2-4 teachers, 0-3 grade-level chairpersons, 0-22 students, 1-6 community members	during school	65-90 minutes	few teachers attended; chairpersons had lighter loads
Suburban	At least 10	3 teachers, department chairperson, principal, at least 3 community members, 2-3 students	during school	65 minutes-4 hours	non-participant proctors
Urban	At least 10	at least 5 teachers, department chairperson, intern. coach, ass't. principal, principal	during school	40 minutes	planning periods

asked participants to identify goals and objectives, conduct needs assessment surveys, use the survey results to prioritize goals, and develop school-level plans. Field agents suggested alternatives and offered advice. Participants generally made most of the decisions, although administrators sometimes indicated that options being considered were unacceptable to them, school board members, or the local community. Teachers developed classroom-level plans individually or in small groups.

In the basic skills projects, participants received training in data collection and analysis procedures, carried them out, and then decided what changes to make. A few of those decisions extended beyond individual classrooms (e.g., to revise schedules), but most did not. During the entire process, team members tended to work independently more than as a group. They went through the same procedures at the same time and interacted frequently, but individually completed practice exercises, collected and analyzed data, and selected classroom-level changes. Planning teams seldom made group decisions or collectively developed program plans.

The Influence of Local School Conditions on Participation

As anyone who has worked in a school well knows, participation in extra projects does not come cheaply. Trade-offs between being involved and performing regular duties must continually be made. How heavy those demands were, and the effects they had, varied among the 14 schools. The major local school contextual conditions that affected participation were the availability of resources, incentives and disincentives for participation, and the existence of tensions within schools. Table 4 summarizes the important factors in each site.

Table 4. Local School Conditions that Influenced Participation

School	Resources	Incentives	Disincentives	Tensions
Middletown	Elementary school; teachers had full schedules. Key participant was specialist with ambition, flexible time. Ass't principal responsible for many routine administrative matters. Money from regional service agency to pay substitutes. Field agent from regional service agency willing to assume many leadership responsibilities.	Achievement test scores low. Contact with other teachers, professionals.	Project required considerable time; substitutes not always satisfactory. Previous innovations dropped prematurely.	Some tensions between teachers, specialist, and administrators.
Patriot	Elementary school; teachers had full schedules. District money to pay substitutes, but they were not always available.	Achievement test scores low; school given provisional status by state.	Project required considerable time; substitutes sometimes not available or considered incompetent, parents complained.	High tensions between teachers and administrators.
Riverside			Participants skeptical that their input would be used, that changes would occur. Suspicion of "hidden agenda" from RBS; fearful of federal intervention.	Tensions in school and district over contracts and layoffs; high rate of teacher absenteeism.
Urban			Participants skeptical that RBS could assist inner-city school.	Tensions among faculty, with community and students, racial overtones.
Farmcenter	Planning team included principal, ass't principal, and counselor, all with flexible schedules. Principal willing to assume project leadership.	Incentives unknown, but evidence suggests that principal looked upon as innovator.	New projects begun which reduced enthusiasm for RBS.	Appeared to be low.

Table 4. Local School Conditions that Influenced Participation

School	Resources	Incentives	Disincentives	Tensions
Oldtown	Planning team included a counselor and 4 administrators, all with flexible schedules. Vice principal willing to assume project leadership. Grant from state.	State graduation requirement plans could be fulfilled through project. Activity-writing team paid. Grant money had to be used for project.	Coordinator very busy; other responsibilities often had priority.	Light tension.
Smalltown Elementary	Elementary school; teachers had full schedules.	Innovation procedures incorporated into teacher evaluation. Inservice credit.	Project required considerable time.	Appeared to be low.
Smalltown Middle	No evidence that time was a serious problem.	Innovation procedures incorporated into teacher evaluation. Inservice credit.		
Southend	Elementary school; teachers had full schedules. Some money from other special project to pay substitutes. School involved in several special projects at the same time.	Achievement test scores lowest in district. Innovation procedures incorporated into teacher evaluation. Superintendent strong supporter of project. Inservice credit.	Project required considerable time.	Appeared to be low.

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Table 4. Local School Conditions that Influenced Participation

School	Resources	Incentives	Disincentives	Tensions
Green Hills	Grant from state. Teacher time limited but flexible.	Students scored low on career education section of State achievement test.	Fear of not meeting other responsibilities. Resentment from non-participants who were repeatedly asked to proctor.	Tensions between administrator's group (some on planning team) and others.
Middleburg	Elementary school; teachers had full schedules. 2 team members were administrators, one a specialist. Money from regional service agency to pay substitutes.	Few incentives for teachers. Initial incentives for administrators (career possibilities for one, friendship obligations for the other) ceased after one year.	Participants' suggestion of changes to make were rejected by principal.	Tensions between teachers, specialist, and administrators.
Neighbortown	Planning team included a counselor and 2 administrators, with flexible schedules. Grant from state.	Administrator interested in career education; also saw project as opportunity to get money for school; teachers flattered by being picked.		Light tension.
Suburban		Principal wanted to develop leadership skills. Some participants concerned about lack of citizenship (e.g., failure to salute flag).	Principal reluctant to continue imposing on non-participants (to proctor, help write items for needs assessment).	Tensions in school over contract negotiation, grievance action. Non-participants resistant to external assistance, impositions on them.
Bigtown	Most planning team members had flexible or light schedules. Career education was the major responsibility of project coordinators. Grant from state.	Coordinator could meet district expectations for curriculum development through project. State graduation requirement plans could be fulfilled through project. Some team members wanted control over curriculum. Activity-writing team paid.	Many team members not interested in doing detailed planning.	Coordinator's status in school/district uncertain; tension between her and staff.

The Availability of Resources

Developing program plans was a lengthy process, and time was scarce in all schools, although more so in some than others. The lack of time was particularly a problem in the elementary schools, where most teachers had classroom assignments and their schedules were full and inflexible. In the secondary schools, time was less of a problem because teachers had more planning periods they could use for project meetings and some participants had few or no classroom assignments (e.g., administrators, counselors, department chairpersons). Also, arrangements to cover classes during one or two periods could be made with relative ease in secondary schools.

The extent to which time was a problem also varied during the life of the projects. For example, it became particularly acute when meetings were held frequently or coincided with the busy seasons in schools (e.g., grading periods, holidays, and at the end of the school year). The availability of time had more influence over participation than any other school context factor. Chapter III addressed the effects of the scarcity of administrative time on field agents; this chapter highlights the scarcity of teacher time.

The lack of sufficient time to attend meetings dampened both teachers' attitudes toward participation and their willingness to continue. Teachers occasionally thought the projects required too much time of them. They repeatedly urged that meeting time be reduced and came to meetings with anxieties about their classrooms.

> There is a tremendous amount of time and paper work and...it adds up to a lot....I feel as though...during the school week, there is so little time when I'm not "engaged" in teaching or in doing school-oriented work and the time when I'm at school when I'm not actually teaching is so precious and I have so

> many things that I have to prepare for school and then to take that time out to attend meetings or to fill in these questions or to calculate whatever. If I do that at school, then all of the things I should have done in school I have to do after school unless I have an RBS meeting till 5:00, then I have to take it home and do it at home and I know that teachers are supposed to stay up until midnight marking papers, but then they don't have any time to do my wash. I know it has to be a time consuming thing because it's so involved and that's unfortunately the rules of the game, but I just felt as though it was a tremendous amount of work and as I said before, maybe if we didn't have the other things that had to be done this year... (From a Southend teacher)

Although most teachers were convinced that making classroom changes was important, they wanted to devote a limited amount of time to formal planning. Consequently, field agents and administrators adjusted the planning process to reduce the burdens on individual teachers, usually by reducing the amount of participation required. For example, field agents and administrators decreased meeting time, carried out some planning tasks themselves or with smaller groups of teachers, and omitted or abbreviated some planning steps. However, reducing the amount of participation meant fewer opportunities to accomplish what the supporters of participation say it should: building commitment, developing local capacity, and tailoring changes to the various sites.

How time to participate was made available also had implications for the form and effects of participation. Several alternatives were used to free classroom teachers to attend meetings: (a) hiring substitutes, (b) asking non-participants to cover classes, and (c) holding meetings during "unassigned" times, e.g., planning periods, lunch periods, or after school. Individual schools sometimes combined the second and third alternatives. For example, meetings at Green Hills and Neighbortown frequently lasted as

much as two hours, spanning participants' class periods as well as lunch and planning periods; during the former, non-participants covered classes.

Hiring substitutes, sometimes viewed by teachers and field agents as the preferred alternative because it released participants for large blocks of time, required monetary resources that were not available in most schools. Only the elementary schools, where the inflexibility of teachers' schedules made the second and third alternatives especially difficult, were able to obtain money to hire substitutes. These funds were acquired through intermediate service agencies (two schools), district offices (one school), and related special projects (three schools). The availability of money, however, did not guarantee that substitutes would be available:

> The meeting had been scheduled as an all-day session, but when we arrived, we learned that five teachers are out today, including the four project teachers (who were not "out" but needed substitutes), and no substitutes were available. The principal decided that the field agent should work with two teachers this morning and the other two this afternoon. The school has been experiencing a substitute problem all year, but today it seemed especially serious. [A district staff member] said that it is final exam time at the local university from which many of the substitutes come and that many people have colds. (From the Patriot field notes)

Even when substitute teachers were available, their use affected participation. Many teachers felt obligated to develop more precise lesson plans for substitutes than for themselves and spent more time than usual preparing for classes. Also, some considered substitutes' instructional skills inadequate; teachers reported they began to feel guilt about neglecting their students. The following are illustrative, although extreme, examples.

> The teacher said she is unhappy about having to have a substitute teacher during the project meetings. Her classroom is very well organized. Kids know what they are supposed to do when they enter the classroom in the morning; little time is lost during the first few hours of school. When she returns after having a substitute it often takes the students time to get back into that routine. She told about having a parent tell her that once she was walking past the school and saw her daughter standing in the second story window of the teacher's classroom. Another parent once called about a discipline problem...Both times, a substitute was replacing her...She...has left project meetings to look into her classroom; she has seen many students misbehaving.
> (From Patriot field notes)

> The teacher talked a bit about the unqualified substitutes that have been covering classes during project meetings. She described one as a "nut." The woman tells the kids she is Dracula and threatens them with strange things. The teacher said that one mother came into her classroom when that woman was substituting and took her kid home. Another substitute, a male, is an alcoholic. She said that some substitutes expect to just sit at the desk; they don't even attempt to keep kids occupied. (From Patriot field notes)

Such pressures sometimes led teachers to urge that meetings be held less frequently or to threaten to withdraw from projects. Consequently, field agents sometimes reduced the number of meetings or shortened activities.

In several secondary schools, non-participants were asked to proctor classes during project meetings. To do so, proctors either sacrificed their own planning periods (three or more schools) or, in an open-spaced building (one school), taught two classes in adjacent spaces. This type of arrangement, naturally, imposed upon non-participants and caused them, according to informants, to resent the projects. Participants were aware of this resentment and became anxious about the time they spent in meetings. Furthermore, this resentment reduced the likelihood that projects could be disseminated successfully to the other teachers.

Holding meetings during participants' free time meant that the meetings were brief, two hours at most and even 40 minutes in one school. Frequently, there was even less time than scheduled because participants arrived late and/or left early. In addition, some participants did not like having to relinquish time they considered their own.

Incentives and Disincentives

Basically, what the above discussion says is that in situations where teacher release time was either scarce or obtained at the expense of peers, participation served not as an incentive but as a disincentive for involvement. Incentives are the perceived benefits of engaging in some behavior; disincentives are the penalties one suffers for engaging in the behavior or the rewards for not doing it (Sieber, 1981). The primary incentives in the RBS projects were improved student achievement, the receipt of favorable (or avoidance of negative) evaluations from administrators, professional contact, the opportunity to exert influence over curriculum, and escape from negative sanctions for not meeting state requirements. Major disincentives in the RBS projects were reduced effectiveness in performing regular teaching responsibilities, lack of expected benefits, and aggrevated or strained relations with peers. The incentives and disincentives that influenced participation in each school are shown in Table 4.

Incentives. A major incentive for participation was the probability of improved student achievement. This was a substantial incentive in the basic skills schools. All but one of these were elementary schools where basic skills instruction was a top priority. In fact, this goal was ranked first in all of the elementary schools according to a survey conducted in

the first year of the study (see Firestone and Herriott, 1981a, for more information on the survey). In addition, several elementary schools had long histories of low achievement test scores and staff reported that the schools' communities, central offices, and state departments were demanding that the scores be improved. Student achievement in career education and citizenship education was a much less serious concern, but still was an incentive. At Green Hills, students had scored low on the career education portion of a state-wide examination and the district central office wanted the school to adopt the program; therefore, people felt compelled to support it. Also, some individual participants were particularly interested in or concerned about career or citizenship education.

Receiving favorable evaluations from administrators or avoiding negative evaluations were other incentives for participating. In several schools, people who were asked to join planning teams said that they did not feel free to decline. One teacher reported that everyone in the school was expected to take part in at least one special project and knew that declining this one meant accepting another. Principals at Southend and the two Smalltown schools made clear from the outset that they thought the projects were very important. Staff found out just how important they were when the principals included time-on-task observations in their evaluation procedures. Consequently, teachers thought that participation should increase their chances of being evaluated favorably. An employee at Bigtown who was expected to develop a career education curriculum realized that the project would help accomplish that objective. In this case, motivation went beyond simple participation to assuming leadership in order to ensure that the curriculum would be developed.

A third incentive might be called "professional contact." Team members valued the opportunities to interact with one another and with outside "experts." In several schools they reported that, aside from project meetings, they seldom interacted with one another, particularly about professional matters. They liked exchanging ideas, learning from one another, and being treated as professionals. The following interviews illustrate this:

> She said the brainstorming session [about strategies for increasing time on task] "was the most valuable to me." She said it was a "free, open atmosphere." The teachers were able to talk about what should be done in the school. She said there are not many other opportunities to talk about these sorts of things. Through the session, she learned that everyone else had the same concerns she did.
> (From the Middletown field notes)

> The teacher said that being on the [planning team] was very rewarding because she likes the idea of having teachers teach other teachers. [Planning team members helped train other participants.] It seemed important to her that people responsible for the project acknowledged that teachers were capable of helping one another. She said that she has said for years that there are good people on the staff at Middletown School and that they can help one another. She feels that "we proved that this year." (From Middletown field notes)

In addition, participation sometimes enabled teachers and administrators to know and understand each other better and gave them an opportunity to interact with outside professionals. Project meetings were sometimes attended by employees of intermediate service agencies and state departments as well as RBS staff.

A fourth incentive that attracted participants was the opportunity to influence decisions about changes which would affect them. This was especially important to the department chairpersons on the Bigtown planning team. The chairpersons were mostly responsible for determining curricula.

Although they did not express much interest in career education per se, they were keenly interested in approving or disapproving plans for incorporating career awareness activities into their respective subjects.

A fifth incentive for participation was the avoidance of negative sanctions for not meeting state requirements. While the projects were in progress, the state in which Bigtown and Oldtown were located issued graduation requirements that included career education. Schools had to report to the state how they intended to meet the requirements. The projects were readily-available vehicles for developing such plans.

Disincentives. A major disincentive for participation was project interference with teaching efficiency. The time and energy spent on participation threatened people's abilities to carry out their other duties. Teachers sometimes felt negligent when their classes were taught by substitutes. Some teachers were expected to cover specific curricula and feared they would not be able to do so, particularly when participation also meant inserting new activities into an already tight curriculum. In response to this, some people asked that project activities be scaled down; otherwise, they might have to withdraw.

A second disincentive to participants was the lack of expected benefits. This had less to do with the RBS projects than with experiences in previous projects. Many had taken part in similar previous efforts and saw few outcomes. As one field agent wrote:

> The similarity to [another project] and experience [the] school has had with [it] tend to make teachers and other adults feel that nothing will be accomplished although verbal agreement will be made. . . . Their input from past experiences, according to participants, tends to be forgotten and their work remains "paper programs." In other words, no real changes, progress, improvements have occurred or will occur.
> (From the Riverside field notes)

Teachers also commented that more projects were started than completed. Some people were skeptical that RBS employees could help them. As one teacher said:

> Experts have come here before and they didn't turn out to be experts; we've been led to develop stuff here that's never been used. (From the Suburban field notes)

Teachers in another school suspected that RBS staff would not understand inner-city school problems well enough to be of any help.

Another disincentive was aggravated or strained relations with peers. Non-participants resented having to give up planning time to proctor classes while team members attended meetings. This situation became even worse when project meetings ended half-way through a class period and proctors watched planning team members leave for lunch early. Another source of irritation was that other teachers sometimes perceived a project as a "frill" and thought that team members received special favors from administrators. Furthermore, participants occasionally did not even have to go to the school because meetings were held at another location.

Tensions

A third school contextual factor that influenced participation was the existence of tensions within schools. Tensions were discussed extensively in Chapter III; thus, they will only be noted briefly here. Tensions that influenced participation in each school are noted in Table 4. A major effect of the tensions was to inhibit the development of commitment and motivation. The tensions led to conflict, hostility, and low morale. Occasionally, meetings were disrupted because team members argued with one another. At other times, prior incidents curbed people's ability to deal

with the tasks at hand. Although tensions usually remained under the surface, their existence still impeded active discussion.

Mediating the Influence of School Context

The considerable difficulty that teacher involvement can pose for a school brings the discussion back to the premise of Chapter III: One of the major benefits of having field agents at a site is that they can adjust the process as local events dictate. One of the most critical adjustments field agents made in the RBS projects was to alter the nature of participation at a site so that it would not create resentment and would facilitate the development of commitment to both the process and the intended changes. These adjustments included (a) using multiple participant groups, (b) reducing the extent of participation, (c) modifying meeting arrangements, and (d) involving fewer teacher participants.

Using Multiple Groups

Nine of the fourteen projects had more than one participant group. These additional groups were either sub-groups of initial planning teams, expansions of teams, or entirely separate groups. They were established for different purposes and served different functions but their effect was to disperse the demands placed on any one set of individuals, thereby rebalancing the costs and benefits scales in favor of benefits. In all, four different sets of groups were used in the RBS projects.

One set of groups was established to perform work initially expected of the original planning teams. At Neighbortown and Farmcenter sub-groups worked together for brief periods of time, doing such tasks as developing goals. Because they worked more efficiently than the larger planning

teams, they reduced resource requirements. A small planning group at Bigtown functioned similarly, but also helped deter resistance from planning team members who were not interested in doing the work themselves. A major portion of the project at Middletown was assigned to a second planning team, lightening the burden of the first. That substantially increased the number of participants. However, using such small groups also lessened the involvement of other participants and potentially lessened opportunities to build their commitment to implementation.

Field agents trained a second set of groups to be local leaders of the basic skills planning teams. The training team members generally met with RBS field agents before meetings to review technical materials they would help present to other team members and to plan meeting agenda. In addition to leading meetings and sometimes helping arrange and conduct other activities, training team members developed expertise in technical aspects of the projects and could help teachers with the procedures. This reduced reliance on external assistance and increased professional interaction among staff. Concomitantly, incentives to participate became more available.

A third set of groups was established to do classroom-level planning, work that was not appropriate for participants who did not teach. At Green Hills and Neighbortown, these groups were sub-groups of planning teams. At Bigtown and Oldtown, entirely separate groups were formed. With this process adjustment, classroom-level planning was carried out by the people who would implement the plans and knew what was appropriate and feasible in their situations.

A fourth set of groups was used to expand the projects to other portions of the schools. At Green Hills and Neighbortown, several teachers

were added to the initial planning teams shortly before classroom-level planning began so that all major subject areas would be represented. At Middletown, a group entirely separate from the original team was formed to include people who had not participated to that point. Members of these groups implemented changes without spending as much time participating as initial groups. The only potential disadvantage of this was that new participants had been less involved in the initial planning stages when the program definition and goals were established and, thus, were expected to accept these program features without the benefit of the preliminary discussions and development activities.

Reducing the Extent of Participation

Another way to deal with the effects of scarce resources and the associated disincentives was to reduce the amount of participation. This was accomplished in two ways. First, RBS field agents, school administrators, or other employees sometimes performed tasks that were initially expected of planning teams. For example, the field agent at Green Hills often asked planning team members to react to alternatives instead of requiring them to develop the alternatives. Similarly, the principal at Southend conducted classroom observations for teachers. At Bigtown, a district administrator worked through most of the planning activities with the field agent and then submitted the results to the planning team for review.

Second, project procedures were sometimes abridged (discussed further in Chapter IV). This was accomplished by, for example, cutting down the number of observations in basic skills schools and postponing and eventually eliminating a survey of community resources at Green Hills and

Neighbortown. Reducing the extent of participation naturally reduced the chances that participation benefits would be realized. Thus, when field agents chose this alternative, they had to weigh it against the potential consequences of maintaining participation at the current level.

Adjusting Meeting Arrangements

Meeting arrangements were sometimes altered to make it easier for participants to attend. For example, meeting times varied at Green Hills so that teachers would not always miss the same class. Meetings in some schools spanned lunch or planning periods, when teachers were not scheduled to be in class and would not have to be replaced. Sometimes meetings were postponed to reduce the pressure participants felt to perform their regular responsibilities.

Involving Fewer Teacher Participants

Participation required fewer resources when it primarily involved people who did not have classroom teaching assignments. Such people included administrators and their assistants, specialists, counselors, department chairpersons (who had some teaching assignments but less than other teachers), community members, and students. As shown in Table 3, teachers were outnumbered by others on most career and citizen education planning teams. However, this process adjustment had to be made with considerable care. Most of the changes would be made by teachers and thus they would be the major benefactors of participation. Planning teams where teachers were in the minority could have been not only less effective in planning but also counter-productive to building a firm commitment to classroom-related changes. Such did not seem to be the case in the RBS

projects, however (except when a large number of participants were students or community members), primarily because this adjustment was in response to school conditions and was not an original feature of the project.

Mediating Local Conditions and Building Commitment

The preceding sections of this chapter described how school context substantially influenced the participation process. Field agents adjusted the process to reduce these influences. Many of those adjustments also changed the nature and extent of participation, primarily by reducing participants' responsibilities and activities and decreasing the amount of time required of them. Given these modifications to the planning process, to what extent was one of the major intents of participation achieved: developing local commitment to the projects? That is, did the extensive changes in the participation process seriously hamper its effectiveness?

Qualitative data gathered in open-ended interviews do not lend themselves to quantification. However, research staff could make rough judgments about the level of commitment in most schools. These judgments were based on data concerning teachers' beliefs about the importance of implementing changes, their willingness to devote time and energy to planning and implementation, and expressions of ownership of the project (e.g., whether they referred to a project as the school's or RBS').

These assessments yielded three clusters of schools. The first cluster consisted of five schools which clearly showed a higher commitment than the others. All of these schools were in basic skills projects. Middleburg was the only basic skills school not in this cluster. The second cluster, four schools, also showed considerable commitment but a number of

staff had mixed or negative attitudes toward the project. In this cluster were Green Hills, Neighbortown, and Oldtown, all career education schools, and Surburb, a citizen education school. Commitment was less uniform among teachers in the third cluster, although several teachers in each school were avid project supporters. This cluster contained one career education school (B town), one basic skills school (Middleburg), and the three remaining citizen education schools.

When this ordering of school commitment to the projects is juxtaposed with the summary of important local conditions back in Table 4, it appears that negative barriers to participation in a school's context did not always produce a low commitment among participants. To be sure, the expected relationship between context and commitment did appear in some schools. At Southend the context for school improvement was mostly supportive and commitment was clearly present; at Urban there were strong barriers to participation and commitment was correspondingly low.

However, there were also schools where the expected relationship did not exist. Contextual conditions had strong negative influences at Patriot and Middletown--time was scarce, substitutes were unsatisfactory, and tensions existed between teachers and administrators. Yet, commitment was high. Conversely, little commitment developed at Farmcenter despite the fact that conditions seemed supportive.

There are at least two explanations for these counterintuitive findings. The first addresses the question set forth in the first paragraph of this section. Field agents deliberately intervened to mediate the influence of local conditions. Process adjustments were usually made to prevent

context from seriously disrupting participation, e.g., from causing teachers to withdraw or schools to discontinue projects. Field agents knew that their adjustments would change the process and perhaps reduce its effects, but they considered that less threatening than the potential consequences of strong disincentives to participate.

Second, development of commitment was influenced by other factors as well. Some projects were terminated before the effects of participation could be strongly felt. For example, RBS withdrew or severely reduced its work at Farmcenter after approximately one year (for reasons unrelated to the specific projects). This action appeared to have detrimental effects on commitment even though the context at the school itself was mostly supportive.

Summary

Local participation in change projects requires considerable time and energy. The extent to which people are willing and able to devote themselves to such projects is influenced by the availability of resources, the incentives and disincentives participants perceive, and school tensions that can impede productive group work. Fortunately for field agents, participation can be adjusted in several ways to reduce the influence of school contextual factors without apparently impairing the development of local commitment to the project. An especially effective way to do this is to establish multiple participant groups. Sub-groups of a planning team can often carry out tasks more efficiently than the larger team and accelerate the accomplishment of specific tasks. Sub-group members can follow through on separate planning tasks or portions of a project, conduct

classroom-level planning, or be trained for project leadership. Other adjustments to the planning process include reducing the extent of participation by eliminating part of the process or conducting it outside the school, for example, at an external agency. Also, meeting times can be adjusted to participants' schedules. Finally, the composition of planning teams can be altered to reduce the number of participants with full-time teaching assignments.

As stated, these methods of reducing the amount of participation do not seem to lessen its beneficial effects on commitment. Nevertheless, field agents must carefully consider the potential consequences of those adjustments when deciding whether to make them. The key is to keep the balance tipped in favor of benefits over costs. Too much concentration on just the costs to participants could, in some instances, also remove the benefits.

CHAPTER VI

Change Outcomes: Implementation

One of the ultimate measures of a change project's effectiveness is how widely promising new practices get implemented in a school (Miles, 1982). This, however, is easier said than done. Studies of other occupations indicate that innovative practices do not spread smoothly throughout a body of practitioners (Rogers, 1962). Diffusing innovations in organizations like schools compounds the problem. A field agent must understand not only individual idiosyncracies, but also the quirks that make the organization unique. This chapter focuses on one dimension of school organization that determined the extent to which innovative practices spread within a school: school linkage. Linkage refers to the extent to which school subunits are interdependent. Essentially, the rule is that the more interdependent subunits are, the more likely change will spread beyond project participants.

This chapter first examines the concept of linkage and its relationship to the number of teachers in a school who implemented new practices. Next, it discusses planning teams and the linkages that temporarily bound them together. The major concern in this section is how these linkages contributed to widespread implementation within the teams. Third, the chapter addresses the issue of spreading change beyond the planning teams. In doing so, the spotlight is on implementation strategies that take advantage of the kinds of linkages in a school as a whole. The chapter concludes with some lessons from this journey into school linkage.

School Linkages and Quantity of Implementation

The history of thought about organizational behavior reveals a recurring fascination with slippages between intents and actions. Even before Weick (1976) popularized this focus under the rubric "loose coupling," characterizations of linkages among an organization's members and subunits richly dotted the literature (Corwin, 1981). In its simplest form, organizational linkage refers to the degree to which parts of a system are able to function independently of one another. In a loosely-linked school, teachers may respond to an administrator's directives much differently from how the administrator intended; that is, if they respond at all. In a school with closer linkages, when one staff member acts, others have to respond.

Several authors have noted that the nature of school linkages can have peculiar effects on change activities. For example, teachers who rarely have to coordinate their actions with others can easily initiate instructional changes, whereas teachers who must clear changes through appropriate channels have considerably less freedom (Weick, 1976). On the other hand, should someone in a loosely-linked school decide that an innovation ought to be implemented throughout the faculty, they may encounter considerable obstacles; the mechanisms to induce and maintain new behavior in others may very well be missing (Firestone & Herriott, 1981b). Recent empirical research lends credence to the idea that widespread and systematic changes are not likely to be made in schools where few linkages exist among its members (Corbett, 1982a; Deal and Celotti, 1980; Rosenblum and Louis, 1981).

This issue is especially salient for technical assistance agents because the research overwhelmingly suggests that schools tend to have loose,

rather than tight, linkages (Miles, 1981). In other words, the organization of most schools is apt to frustrate the spread of new practices, unless special steps are taken.

The first step is to understand what linkages look like; that is, to recognize characteristics that indicate the extent of a school's linkages. Weick (1976) singles out examples of loose linkages in schools, including a slow spread of influence, the absence of regulations, high teacher autonomy, low visibility of work performances to others, few efforts to coordinate activities, and few prerequisites for courses. Lortie (1969) and Deal and Nutt (1979) highlight the notion of a zoning of control over organizational decisions; Rosenblum and Louis (1981) emphasize the influence of key administrators as supplying an important bond; and Blumberg (1980:4) points to shared understandings among educators about teaching and its goals as "the glue that binds."

This study examined how three indicators of the relative presence or absence of school linkages related to implementation. First, it looked at the amount of time teachers in departmental or grade level meetings spent discussing issues as opposed to listening to one person make a presentation. Through such horizontal communication, teachers would more likely develop the kind of shared understandings Blumberg (1980) noted. This, in turn, could result in some joint planning of instruction. Second, the study investigated the extent to which school rules actually governed teachers' actions. Here, the focus was on the vertical linkage between formal policy and actual behavior. Third, it examined the amount of agreement among teachers about the importance of the RBS project's content area as a school

goal. High agreement would indicate that teachers were at least united in their beliefs about what is important in schooling.

Data on these three indicators were collected as part of a larger survey on the 14 schools' organization. A full report on this survey is available in Firestone and Herriott (1981b). The three indicators were measured by teachers' responses to three questionnaire items: one which asked what percentage of time in departmental or grade level meetings (if held) was devoted to discussion; a second which asked respondents to indicate on a four-point scale how consistently the school enforced policies on the use of lesson plans and curriculum guides; and another which asked teachers to rank the importance of potential goals for their schools. The school score on the first item was the average of the percentages of discussion time; on the second, the score was the average of the percentages of teachers saying rules were "usually enforced" in the two policy areas; and on the third, the school score was the percentage of teachers who ranked goals related to the RBS project as the number one school goal.

These scores were then correlated with ratings of the quantity of implementation of classroom changes in a school. Implementation has been measured in a variety of ways in the research literature. For example, Hall and Loucks (1977) assessed the different levels of use of an innovation, ranging from non-use to renewal. Similarly, Larsen and Werner (1981) examined types of use from "considered but rejected" to "adaptation" of an innovation. In this study the intent was to depict the spread of changes in a school. Using the fieldwork data, research staff counted the number of teachers in a school who altered their classroom behavior as a result of

the RBS project. This definition of implementation most closely resembles Rosenblum and Louis's (1981) notion of the "quantity" of change. A school score on the quantity of implementation was the percentage of teachers in a school who exhibited some new behavior. Table 5 lists the number of teachers in each school, the percentage of those who made changes, and the school scores on each of the linkage measures.

If the above generalizations about linkage and implementation are accurate, where the percentage of time given to discussion is high, so is implementation. This is primarily because discussion increases the probability that teachers will share new ideas or activities they have discovered. Obviously, for an innovation to spread in a system, information about it has to reach teachers. In addition, over time teachers likely will re-examine these ideas to see how they have been used in practice. In this way teachers receive some reinforcement for trying new activities through professional interest from others.

Such seems to be the case. The bivariate correlation between the percentage of time given to discussion in departmental meetings and the quantity of implementation was .46, using Spearman's nonparametric statistic. This correlation was significant at the .05 level.

Interestingly, the frequency with which departmental meetings were held correlated negatively with the quantity of implementation. The -.60 correlation was significant at the .01 level. This suggests that simply holding meetings is not indicative of linkages. <u>What is important is the nature of the interaction that goes on in the meetings</u>.

Table 5

Quantity of Implementation and Measures of Linkage

School	Classroom Teachers	Teachers Making Change	Quantity of Implementation	Discussion	Role Enforcement	Goal Consensus
Patriot	18	6	33%	53%	72%	59%
Middleburg	31	8	26%	58%	73%	53%
Middletown	22	18	82%	75%	20%	70%
Southend	13	10	77%	73%	85%	65%
Smalltown Elementary	35	19	54%	69%	79%	89%
Smalltown Middle	38	8	21%	70%	69%	75%
Urban	77	0	0%	60%	52%	11%
Farmcenter	43	4	9%	59%	52%	5%
Riverside	63	2	3%	62%	49%	17%
Suburban	49	6	12%	70%	69%	0%
Green Hills	45	12	27%	71%	55%	8%
Neighbortown	49	11	22%	69%	53%	4%
Bigtown	150	10	7%	57%	64%	15%
Oldtown	141	19	13%	48%	71%	18%
Mean			27.6%	63.8%	61.6%	34.8%

In addition to the horizontal bonds among individuals with similar status in a school, there can be vertical bonds between formal policy and individual behavior. When policies are consistently enforced, one would expect greater compliance with them; and when staff members generally comply with policies, policy changes can be an effective means of inducing new behavior in a school. For instance, in a school with a close linkage between curriculum guidelines and practice, any change in the curriculum should instigate new behavior by most teachers using that curriculum. In fact, such changes are one of the critical ingredients for insuring that innovations last (Glaser, 1981).

Although the projects did not actually attempt to alter formal policy, in some schools policies did change. Sometimes, when teachers perceived a new policy regarding project-related changes (regardless of whether a policy had actually been formed), they began to pay increased attention to project emphases in their classroom behavior. One would expect policy changes to be more visible or adherence to perceived policies to occur more often in schools where rule enforcement is strict rather than slack.

The data seem to support this expectation. The correlation between the enforcement of rules about lesson plans and curriculum guides and the quantity of implementation was .43, significant at the .06 level.

The third indicator of linkage was the percentage of teachers who ranked goals related to the projects as the number one school goal. High agreement indicates that staff are linked by a common belief about the school's mission. A change effort that is in line with this mission is likely to be looked upon favorably throughout the school. Resistance

toward it would be much less than in a school where there is little consensus about appropriate goals. As a result, widespread implementation is more probable in schools where agreement over goals exists.

Once again, the data imply that this type of linkage is a useful facilitator of change. The correlation was .58 and was significant at the .02 level.

Of what use to field agents is this foray into organizational linkages? At purely an awareness level, the data suggest two important points. First, greater implementation is possible where the relationship between rules and behavior and the agreement about goals resemble bureaucratic situations. Second, when relationships among teachers are similar to collegial behavior in established professions, greater implementation is also highly probable.

Yet, by themselves these findings do little to help an agent cope with day-to-day school change efforts. An agent cannot pick only schools with interdependent tendencies as clients. Moreover, schools are not uniformly characterized by tight or loose linkages. There are, instead, pockets of tight linkages in generally loosely organized schools, and visa versa. A single strategy for implementing change is not going to produce the same outcomes in all parts of a school.

Nevertheless, these findings do have two important lessons for providing technical assistance. Lesson one is that the concept of linkage is, indeed, pertinent to successful school change. The more linkages there are, the more innovative practices will spread. If there are few existing linkages in a school, the agent can try to establish conditions under which such linkage is possible. One way to accomplish this is to create a

temporary system (Miles, 1964), such as a planning committee, as a vehicle for school improvement. Thus, without having to revamp an entire school from the start or rejecting it as a client, the agent can establish a beachhead for implementation.

Second, the agent can identify where tighter linkages occur and use these to move implementation beyond the initial planning committee. For example, the agent may try to include on the planning committee representatives from departments which often discuss instruction; or, if teachers adhere to the curriculum closely, the agent should include individuals with authority to alter the curriculum on the planning committee. In essence, the agent should first find out where linkages are and then use them to an advantage.

Of course, it is easy to give advice; more difficult to use it. The suggestions above, along with their problems and prospects, are examined more closely in the next two sections.

Temporary Systems: Creating Linkages to Promote Change

The previous section contained some good news and some bad news for field agents. The good news was that tight linkages in a school facilitate systematic and widespread change; the bad news was that field agents will not likely find many schools which have such linkages. Even though some of the schools in this study did have tight linkages, this was only in comparison to the other schools. Certainly, no school resembled an ideal type of the tightly-linked system. This means that unless some measures are taken to strengthen the bonds that tie school personnel together, the prospects for comprehensive change are dim, indeed.

In lieu of undertaking a massive organizational restructuring before beginning to improve a school's instructional program, an agent can help establish a temporary system for implementing change. A temporary system consists of a group of individuals who engage in a joint task for a limited period of time (Miles, 1964). Typically, a small subset of organizational members comprise such groups. Through frequent discussions and joint tasks, this group will gradually show signs of a tightly-linked system which, at least within the group, should lead to successful implementation of new practices.

Consider the differences in linkages between RBS planning groups and the schools as a whole. First, most teachers in the 14 schools had few moments to talk shop with their peers; members of the planning teams were regularly able to toss around ideas and brainstorm activities. Second, most teachers made instructional decisions about their classrooms alone; members of the planning teams usually made joint decisions that were binding for all members. Third, classroom instruction was conducted away from the eyes of peers and supervisors except for one or two days a year; participants' planning behavior was continually centerstage--providing easy access to information about skills and other resources available in the group. Finally, teachers often worked in settings where there were competing goals; planning team members were in the company of others who, by their participation, had indicated a commitment to the goals inherent in the project. All in all, the temporary systems represented by the planning teams had more opportunities for discussion, more joint responsibility for decisions, greater adherence to group procedures, and greater agreement about their priorities than existed in a school as a whole.

To be sure, temporary systems do not automatically develop closer links than permanent systems. There can be considerable variation. For example, the kinds of interpersonal interaction typically found in in-service workshops is similar to that generally found in loosely-linked schools. These settings rarely provide much opportunity for discussion among participants. Individuals are usually free to act or not to act on information, and feelings are mixed about the importance of the activity. Because of these features, such workshops make no tough demands on school staff to behave in new ways and, thus, are relatively easy to arrange. Unfortunately, they seldom lead to widespread change.

On the other hand, a temporary system made up of a series of workshops on one issue is more likely to generate tighter linkages among participants. This format allows teachers to consider ideas more thoroughly as a group and grants increased time for discussions. This system may also have the added value of heightening the importance of the workshops in the eyes of participants, although in the end participants remain free to either use or not use new knowledge. Two of the RBS schools, Bigtown and Oldtown, used this kind of temporary system..

The remainder of the RBS projects used planning groups as temporary systems for implementing change. As indicated, not only did these groups meet regularly for half a year or longer and provide frequent opportunities for discussion, but they also entailed joint responsibility for decision-making.

Temporary systems for school improvement can be compared along at least three dimensions: duration, extent of discussion opportunities, and

degree of joint decision-making responsibility. Figure 2 compares the three types of temporary systems discussed above on each of these dimensions and makes some guesses about the nature of linkages likely to result in each system and the quantity of implementation to expect.

Systems of short duration, with few chances for discussion and no shared responsibility for acting on information, will probably develop few linkages among members. Systems with characteristics further along the three dimensions will tend to exhibit closer linkages. Given the relationship between linkage and implementation, it is possible to predict the spread of change throughout the temporary system. Systems resembling one-day workshops will foster few individual changes; workshop series will lead to more individual changes; and changes will be implemented by most members of planning teams.

The planning teams and workshop groups in the RBS projects fell close to the tightly-linked end of the continuum. For this reason, one would expect that most project participants would have altered their behavior to be in line with project goals. The data in Table 6 support this expectation for teachers. In 12 of the 14 schools, most (if not all) participants changed their classroom behavior, at least initially.

The two schools where participants did not implement new practices do not constitute a large enough sample to generalize about conditions which make temporary systems less effective. Nevertheless, events at these schools are informative. In both cases, planning groups never showed any signs of system characteristics. Implementation failure, therefore, was not so much the result of shortcomings in a temporary system as the inability to establish any system at all.

Examples of Temporary Systems

Dimensions of Temporary System Characteristics	In-Service	Workshop Series	Planning Committees
(1) Duration	Short	Medium-long	Long
(2) Discussion opportunities	Non-existent or few	Occasional	Many
(3) Decision-making responsibilities	Individual	Individual	Joint
(4) System Linkages	None	Loose	Tight
(5) Likely Change Outcomes	A few individuals will innovate	More individuals will innovate	Most individuals will innovate

Figure 3. Dimensions and Examples of Temporary System

Table 6. Implementation Among Planning Team Teachers

School	Number of Teachers on Planning Team	Teachers Making Change
Middleburg	8	8
Urban	4-5	0
Suburban	4	4
Riverside	3-6	2
Smalltown Middle	4	4
Smalltown Elementary	4	4
Farmcenter	5	3
Southend	7	7
Oldtown	20	19
Bigtown	18[a]	10
Neighbortown	7	6
Green Hills	6	6
Middletown	16	14
Patriot	4	4

[a]Eight of these teachers were department chairpersons who had no classroom teaching responsibilities.

At Urban, the group was never able to agree on a school need the project could address. One member commented, "If you can't fix our heat or improve the food, we have no use for you (RBS)." At Riverside, staff attended meetings voluntarily. This, coupled with a deeply ingrained distrust of the motives of outside assistance agencies, made turnover from meeting to meeting so great that no two meetings had the same participants present. These two examples suggest that, in some schools, it may be difficult to establish temporary systems, particularly if project goals are secondary to more pressing needs or if previous projects have left ill-will about school improvement. In such schools, field agents may have to give considerably more time to initial start-up activities in order to identify important needs and establish a sense of trust.

By definition, at some point a temporary system ends. This juncture is a critical event for the maintenance and spread of change. Chapter Seven focuses on maintaining changes; the next section of this chapter takes a look at how existing linkages in a school can help spread change beyond the original planning team.

Beyond the Temporary System: Taking What the School Gives

Over the years, research on the social organization of schools has achieved greater understanding of how schools work. Two findings, in particular, are germane in this discussion. First, schools tend to be more loosely than tightly linked (Miles, 1981). This does not mean, though, that field agents can stock their arsenal of change strategies solely with whatever combats the situation. The second finding is that schools do not seem to be uniformly organized, either across school levels or within

school buildings. Firestone and Herriott (1982) discovered that elementary schools tend to have tighter linkages overall than do secondary schools; Wilson and Corbett (1983) found that departmental or grade level subunits were occasionally structured in completely opposite ways than a school as a whole. The significance of this for field agents is that they must alter their approaches to implementing change as they move from level to level among schools and from subunit to subunit within schools.

To do this well, an agent must spend time sensing where couplings exist and then try to take advantage of them. The next section highlights two kinds of linkages: horizontal bonds among teachers and vertical linkages among administrators, procedures, and teachers. Naturally, both kinds of linkages can be present to greater or lesser degrees in any school. Figure 3 indicates strategies which take into account four possible linkage mixes.

Cell One: Selling Key Individuals on the Innovation

Natural diffusion as a strategy for spreading change enjoys a favorable position in the folklore of teaching. Numerous observers of school life have pointed to the faculty lounge as a more than adequate means for passing gossip, innuendo, hearsay, and knowledge among staff. When the principal at Smalltown Elementary was asked if teachers not participating in the RBS project knew about it and had made any changes, the somewhat disdainful response was "You obviously aren't familiar with elementary schools...Things spread through the grapevine like wildfire."

Nevertheless, subsequent interviews with teachers in the school revealed that information and change spread faster along some branches of the

Vertical Linkage

Horizontal Linkage	Low	High
High	Natural Diffusion: Selling Key Individuals on the Innovation (1)	Natural Diffusion: Selling a Subunit on the Innovation (2)
Low	(4) Extending Temporary System	(3) Changing Policy and Procedures

Figure 4. Kind and Degree of Linkage and Strategies for Spreading Change

"grapevine" than others. The success of introducing a new idea to a core group of teachers and then waiting for it to spread naturally throughout the school depended highly on the presence of tight linkages among teachers in the various subunits. Where a subunit was linked by its instructional program or where two teachers had developed friendship or professional bonds, change readily spread; where teachers tended to work in isolation, change began and ended with the teacher who formally participated in the project. For example, in one intermediate grade subunit at Smalltown Elementary, teachers routinely talked about instructional activities, planned together, and jointly evaluated the activities. Symbolic of this integration of work-related tasks was the fact that the teachers had placed their desks in a common work area in their end of the building. Two years after the project had ended, all of the teachers had implemented new instructional strategies to make better use of class time, including a complicated arrangement of team-teaching students. Staff new to the team quickly adopted similar strategies, to the point that the team captain once challenged a researcher to observe the classrooms and pick out the teacher who had been on the team for only five months.

On the other hand, this kind of integration was totally absent in one of the primary grade subunits in the same school. Teachers kept their desks and professional materials in classrooms, and little discussion and no joint planning took place. In this subunit, which had remained intact since the project ended, only the participating teacher had ever made any changes.

Bonds developed among pairs of teachers in several of the schools. This also helped spread change from a teacher in the project to one who was

not. This phenomenon was particularly apparent between two sets of teachers, one at Southend and the other at Patriot. In both instances, the teachers so routinely shared ideas about teaching and coordinated instruction with one another that project-related information automatically became infused into their conversations.

The data are full of examples of changes both beginning and ending with planning team participants. Oldtown was typical of most of the schools. To the extent that classroom changes were made, they were made by project teachers. These teachers said that a major reason other teachers did not pick up the changes was the lack of opportunity for teachers to talk with one another. One cause of this was a split schedule in which some teachers and students came to and left school early while others came and left later. The consequence was that there was only a very short time each day when every teacher in a department was physically present at school. Thus, few meetings or even informal conversations were possible. With no way to link teachers with one another, it was almost assured that information about the RBS projects and new practices would remain solely with original participants.

These findings fly in the face of popular arguments that teacher-to-teacher communication is rapid and efficient. That impression may hold for some of the teachers some of the time, but it is not typical for most teachers. The results of using a core group of innovators to instigate change throughout a faculty naturally will be uneven at best. Field agents can push the process along, however, by finding out the where tight horizontal bonds do occur and inviting at least one of these teachers to join a planning team.

Cell Two: Selling a Subunit on the Innovation

There were no schools in this study that were tightly-linked both horizontally and vertically. The evidence from other research suggests that they are generally rare. Individual subunits within schools where teachers frequently communicate with one another and consistently adhere to written curriculum guidelines are more common. Such arrangements were found in all schools in the study. There was a typical pattern by which change spread in these subunits. First, an innovative practice took hold as a promising idea among grade-level or department members, and then was incorporated into the group's operating routine.

In working with such subunits, the field agent's strategic problem is not how to spread change; the group's own communication and operating mechanisms take care of that. The problem is selling the group, not just an individual, on the idea in the first place. The situation here is different from that of the subunits in Cell One, where the goal was to recruit one teacher who was in touch with and well-respected by other teachers and then to let that person spread the new practice throughout the group. In Cell Two not only are group members' work activities integrated, but they are also bound by established procedures. Individual teachers are not usually free to implement new practices without the advice and consent of the total subunit. To do so would be to treat cavalierly a curriculum already endorsed by the group.

The social studies department at Neighbortown was typical of such subunits. The departmental chairperson, a planning team member, resisted making any but the most perfunctory changes during the pilot test. Although at first field agents questioned this individual's commitment to the

project, they soon realized that the root of the problem was not the chairperson's own reticence but the organizational nature of the subunit. Each teacher in the department taught according to a set curriculum to which they were all committed. Anything more than a cosmetic change in practice encroached on this commitment. The only way to modify the curriculum was for a teacher to develop a proposal and present it to the group. The group then rejected or accepted it as binding for the entire department.

Once this problem was brought to light, the field agent's task became to convince the subunit to alter its curriculum. In this case, the teacher finally requested that the field agent meet with the department and explain the rationale for making the proposed changes. The teacher had done so previously informally but felt the project would get the best hearing if the field agent became involved. The group subsequently acknowledged the project's objectives as valuable, incorporated some of them into its priorities, designed some initial changes, and established an agenda to tackle others. In the end, this one meeting accomplished more in terms of promoting innovation in the department than had several months of nudging the individual teacher.

This example amply illustrates that individual resistance to change can be as much the result of subunit constraints as individual predilections. Resolving the problem may require meeting with an entire subunit and actually selling them on the idea. The bright side of this situation, though, is that because such department or grade-level subunits have established means for altering curricula, the problem of promoting implementation takes care of itself.

Cell Three: Changing Policy and Procedures

Field agents may came across schools where most of the bonds are vertical; that is, teachers' actions are bound by rules and procedures or are easily influenced by administrative behavior. In fact, in this study, vertical linkages were more frequent than horizontal ones. Three kinds of vertical linkages were taken advantage of in the RBS projects to promote implementation: between performance evaluations and teacher behavior, between curriculum guidelines and teacher behavior, and between state mandates and school behavior.

Principals at Smalltown Elementary, Smalltown Middle and Southend changed evaluation procedures to promote implementation effectively. What they did was simply to include project-related classroom changes on their checklists of teacher behaviors to observe. Although field agents feared that teachers might react negatively to this, such was not the case. Quite conversely, the evaluations indicated to teachers that the principal thought the changes important enough to assess whether they were actually being implemented. The effect was that all teachers became accountable for achieving project-related goals. Interestingly, teachers in some schools where principals avoided this use of evaluations indicated that without administrative mandates, there was little to induce some teachers to change.

Occasionally, teachers were bound to curriculum guidelines. In these instances, the most effective way to spur change beyond the planning team was to alter the guidelines. To do this, the field agent had to be sure to involve key decision-makers in planning. In subunits like those in Cell Two, teachers made most of the curriculum decisions, and so, the entire

department had to have a hand in making revisions. In departments at Green Hills and Bigtown, the chairperson was the key decision-maker on curricular issues. Thus, the inclusion of these individuals in the planning process was critical. In fact, implementation did not really reach very far at Green Hills until the principal put department chairpersons in charge of designing new practices. In still other schools, such as Patriot and Southend, curricular decisions were made at the district level. In these schools, then, administrators were crucial project participants.

In five of the schools, state mandates and program initiatives paved the way for implementation. Two compelling forces bound the SEAs and schools: money and regulations. In each school, RBS could point to a formal state goal verifying that the project was addressing critical state priorities. However, direct SEA involvement was rarely sought or even felt. The only exceptions were when the state made money available or issued a regulation governing school responsibilities for instruction in the project-related area. In cases where schools wrote proposals to obtain funds for project activities, the additional money gave a big boost to implementation primarily because the project could continue at full-speed in spite of local funding problems. State regulations, such as graduation requirements, had more direct effects on implementation. For example, at Oldtown, project-related classroom changes were a clear means of meeting one of the requirements. The district decided that the approach was appropriate for all faculty, and so, urged that the changes be made throughout the school.

Given that these three types of vertical linkages can advance implementation in some schools at some times, how can the field agent determine

which one to use where? The first step is to check a school's evaluation system. If evaluation is frequent and teachers say it is important, then encouraging modifications that complement the innovation can be useful.

Second, if such vertical linkage does not exist or there is a strong philosophical bias against what could be termed a "heavy-handed" approach, the field agent would be wise to assess the relationship between the formal curriculum and teacher behavior. Other writers have termed this kind of assessment as "curriculum-mapping" (English, 1978). Keep in mind that the relationships that characterize a school as a whole will not necessarily characterize relationships in each subunit. Where the curriculum seems to be binding on instructional behavior, including key curriculum decision-makers in planning discussions could expedite implementation immensely. These decision-makers might be an entire department, a chairperson, or an administrator, depending upon how and by whom curricula are determined.

Third, the field agent should do a little information-gathering around SEAs to find out what is coming down the pike. There may be a logical tie-in between a change project and either funding opportunities or forthcoming state requirements that can provide a boost to implementation. In fact, Brickell (1980:207) argues that the most effective school improvement weapon is "a stinging mandate followed by a powerful technical assist." Although the sequence of the one-two punch may be reversed in some projects, the results can be the same.

Cell Four: Extending the Temporary System

It is conceivable and probable that a field agent may encounter a school with no significant linkages or at least none that can be readily

put to use. The latter may happen if, for example, political complications between a strong administrator and a compliant but resentful faculty deter the use of mandates. In these cases, the field agent can create linkages by extending the temporary system established in planning to embrace an ever-widening cast of staff.

To an extent, field agents used this approach at Neighbortown and Green Hills. In both schools, new members were added to the planning team when it came time to actually design new classroom practices. These additional teachers eventually implemented changes to a similar extent as did original members. However, both field agents and participants saw problems with repeated iterations of expanding the team. Primary among these was the need to recapitulate and, occasionally, renegotiate decisions already made. Thus, the first expansion of the team was useful and effective but participants were not very sanguine about the prospects of repeating the procedure several times.

The Middletown field agent took a slightly different tack. There, class schedules were reworked so that all the teachers in each grade would have a common planning period at least four days a week. Each grade was represented on the planning team and these representatives, in turn, became the "field agents" for the rest of the teachers in that grade. The intent at Middletown, then, was not so much to increase the size of one temporary system but to create five or six new systems to complement the original one. This effort met with somewhat mixed results. The reason, once again, had less to do with the temporary system's effectiveness than with getting it established. In this instance, teachers were not in the habit of using their planning periods in this way. When administrators began to take a

less proactive part in seeing to it that meetings were held, the frequency of the meetings dropped considerably.

Extending the temporary system, then, is possible, with some caveats. Enlarging the original system seems to become cumbersome rather quickly. Creating several new systems with original planning team members as leaders appears more viable. The success of this method requires careful attention to scheduling and sufficient administrative impetus to keep the system intact long enough to begin to exhibit the necessary system linkages for widespread implementation to result.

Summary

This chapter has demonstrated the importance of horizontal and vertical school linkages in implementing change. The data echo the findings of other research that indicate implementation is more widespread in schools where there are tighter linkages. The critical lesson for field agents is that they must fit implementation strategies with the kinds of linkages available in a school. Where horizontal linkages are tight, the agent's major task is to sell the innovation to individuals in a highly-integrated subunit or to an entire subunit if it also has tight vertical linkages to the curriculum. Where vertical linkages are tight, the object should be to alter policies and procedures governing instructional behavior. This requires identifying key decision-makers and including them in planning. Finally, where few linkages of any kind exist, the most effective strategy will likely be to extend the temporary system, either by expanding the original planning group or using individuals on the original group to form additional groups.

CHAPTER VII

Change Outcomes: Continuation

What happens to changes in a school's instructional program once they are implemented? Are they readily retained? Or, are they casually discarded once the attention of district curriculum coordinators and building administrators shifts elsewhere? And more importantly, what can field agents do to enhance the probability that the changes they promote will last? Hunting for answers in the literature on educational change is likely to be disheartening. Although schools have been frequently criticized for their hypochondriacal tendency to seize a highly-touted remedy only to replace it with the next miracle cure that comes along, few studies have systematically examined the persistence of new practices in schools.

Attention in this chapter turns to the second change outcome identified in Figure 1: the continuation of change. The discussion illuminates some of the school-related factors that promote or hinder the extent to which an innovation is maintained beyond its initial period of implementation. The central theme is that once formal school improvement activities end, so will most of the new practices unless (1) a school is organized so that incentives and encouragement continue to flow to those making changes or (2) corresponding changes are made in the rules and guidelines governing instructional behavior.

The first section of the chapter discusses the research literature on the durability of changes. Next, findings related to what happened in the schools are presented. Finally, the chapter draws implications for field agents from these findings.

The tone of this chapter is somewhat different from the previous four. In those chapters field agents were frequent and active participants in the change process. Thus, their behavior was constantly in the spotlight. This chapter examines what happens to changes after field agents withdrew from the schools. For this reason, much of the discussion focuses solely on the school. However, the role of field agents once again will be highlighted at the end of the chapter to point out how they can contribute to lasting change.

Research on the Durability of Change

Researchers often divide the change process into conceptually distinct stages that often overlap in practice. For example, Hage and Aiken (1970) note four: (1) evaluation, or a period of assessing organizational needs; (2) initiation, which denotes the beginning adjustments an organization must make to accept a new program; (3) implementation, or the period during which the new program is tried out; and (4) routinization, or the stabilization of the new program as part of permanent practice. This last stage has been accorded several labels. Some researchers call it "incorporation" (Berman & McLaughlin, 1976); others refer to it as "continuation" (Rosenblum & Louis, 1981). Because the latter term connotes the idea that change can endure as the result of either intentional efforts or simple inertia, "continuation" is used throughout this chapter.

According to research, the point at which implementation becomes continuation is when special external resources allocated specifically to the change effort are removed. This is much like when a patient is taken off a life support system and must maintain critical functions independently of

special assistance. Berman and McLaughlin (1977) and Rosenblum and Louis (1981) both noted a drop in the amount of change when federal funds were withdrawn from projects. Thus, the removal of outside support seems to be a particularly traumatic event in maintaining new practices.

Miles (1964) provides another way to view this juncture in the life of a change project. He labels special projects involving a subset of organizational members as "temporary systems." That is, project participants constitute a collectivity of people who (1) are called together for a special purpose; (2) are expected to disband when either their objectives have been attained, their allotted time is up, or their meeting is over; and (3) through the pursuit of a joint task, take on the characteristics of group life. The disbanding of a temporary system to promote change, then, can be thought of as an indication that organizational concern has shifted from getting new practices started to seeing that they are continued as routine operation.

What happens to change when the system supporting it is on its own? Rosenblum and Louis (1981) found that in a school district where implementation goes well, so does continuation. While the amount of change did drop somewhat when federal assistance ended, schools which implemented more than others also continued more (although there seemed to be a reduction in the disparity among schools over time). Because most of the research on change during the past decade has been on implementation, this finding should be heartening to field agents; the understandings they have developed about implementation will serve them well in understanding continuation.

However, other research on organizations suggests that this link between implementation and continuation is by no means assured. Hage and Aiken (1970) and Yin et al. (1978) discovered that special attention had to be paid to the "routinization" of changes to insure that they lasted. For example, new practices had to be codified into rules governing action, be included in training activities for newcomers, successfully survive budget reviews, and outlast the tenure of the individuals who were intimately involved in planning the innovation. Additionally, Berman and McLaughlin (1976) noted that if these new practices actually replaced existing practices, they were more likely to continue. The prospects for "add-on" activities were lower. The lack of such routinizing events reduces the prospects of change persisting.

Glaser (1981) acknowledges similar means for promoting change durability. Also, he discusses several means that are slightly different in tone. These are related to the kinds of interaction found in an organization. In particular, he says that opportunities for staff to discuss changes once implemented, to provide feedback to one another on the success of certain changes, and to receive continual reinforcement for using new practices have all been shown to facilitate lasting change. Additionally, these kinds of events are more likely to occur if one or more people at a site assume active responsibility for championing the innovative effort.

Thus, research shows that two categories of post-implementation organizational events can influence the extent to which new practices are continued over time: (1) the provision of opportunities for discussions about and reinforcement for continuing new practices and (2) the incorporation of the innovation into operating procedures. Added to these, there is a third

category of events that affects continuation: assessments of the effectiveness of changes. As Rogers (1962) observes, not all changes should be continued. Presumably, some changes will prove useful in assisting attainment of desired goals and others will not. Less useful changes will likely be discarded.

Significantly, the cumulative research on implementation warns that knowing that certain critical events must take place does not insure their occurrence. In fact, one of the major lessons from the past decade is that there are powerful conditions in a school's context which can stall, stop, or speed up the change process, often in spite of determined, intelligent, and committed individuals (Berman, 1981). Field agents must pay careful attention to school characteristics which can ease or block the occurrence of these events after implementation. It is to this issue that this chapter now turns.

Critical Post-Implementation Events and the Continuation of New Practices

Table 7 depicts the changes made during implementation of the RBS projects and the changes remaining after one year or more. These changes were of two types: (1) individual changes in how staff discharged their instruction-related responsibilities, such as new classroom activities, different sequencing of lessons, and new classroom management techniques; or (2) alterations in procedures or policies, e.g., a new honor code or different scheduling practices. Of the 12 schools where more than one year had passed between the end of formal project activities and the continuation interviews, six schools had essentially maintained their changes at the same level and six had noticeably reduced them. In one of the two

Table 7. Implementation and Continuation

SCHOOL	NATURE OF IMPLEMENTATION[a]	NATURE OF CONTINUATION	ELAPSED TIME[b]
Middleburg Elementary	8 teachers made changes	Reduced emphasis from teachers	24 months
	Slight rescheduling of how special students handled	Schedule changes either not continued or too slight to notice	
Smalltown Elementary	Approximately 19 teachers made changes	Continued except for 2 who who left; one new teacher adopted practices	24 months
	Principal and assistant principal emphasize changes in evaluation	Continued	
Smalltown Middle School	8 teachers made changes	All but one continued	24 months
	Administrator changed evaluations	Continued	
	More time allocated to language arts	Continued	
Riverside Junior High	2 teachers made changes	One teacher left; one dropped	24 months
	Increased meetings of parents-teachers	Meetings no longer held	
Suburban Junior High	6 teachers made changes	Continued	24 months
	Principal got new leadership skills	Continued	
	New curriculum in social studies	Continued	
	Student council changes	Continued	
Urban Junior High	Reorganization of student council	Continued	24 months
	Revisions in discipline code	Continued	
	New awards/honor system	Continued	

SCHOOL	NATURE OF IMPLEMENTATION[a]	NATURE OF CONTINUATION	ELAPSED TIME[b]
Farmcenter Junior High	3-5 teachers made changes	Discontinued	18 months
	New awards assembly	Continued	
	New teacher committees	Continued	
Southend Elementary	10 teachers made changes	Continued; two reduced use	12 months
	Principal altered evaluations	Continued	
Green Hills Junior High	12 teachers made changes	9 continued; 3 dropped or reduced emphasis	12 months
	Incorporated approach into reading	Continued	In progress
Oldtown High School	19 teachers made changes	Continued; 4-5 reduced use	12 months
	Approach to be used to meet state graduation requirements	In progress	
Neighbortown High school	9 teachers made changes	6 continued; 3 dropped or reduced; 2 additional teachers adopted	12 months
	2 counselors altered scheduling	Continued	
	Librarian collated special materials	Discontinued	
	New course started; 2 teachers trained	Continued	
Bigtown High School	10 teachers made changes	Continued	12 months
	District adopted approach district-wide	In progress	
Middletown Elementary	At least 18 teachers made changes	Some reduced emphasis evident	In progress
	Scheduling changes	Continued	

SCHOOL	NATURE OF IMPLEMENTATION[a]	NATURE OF CONTINUATION	ELAPSED TIME[b]
Patriot Elementary	6 teachers made changes	Reduced or dropped one major change; kept others	In progress
	Principal altered evaluations and formats of lesson plans accepted	Continued	
	Scheduling changes for special students	Continued	
	Districts adopted approach	In progress	

[a]Excludes awareness changes which were substantial but difficult to track over time.

[b]Schools are ordered according to elapsed time from the end of implementation, with those having the greatest elapsed time listed first.

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schools where formal project activities were still in progress, there were already strong indications that fewer changes would be continued than were implemented.

It should be noted in Table 7 that changes in procedures, schedules, and formal curriculum guides tended to be retained. This meant that, in one way, schools like Urban and Suburban which had difficulty altering much more than a few peripheral procedures could be credited as maintaining all of their changes. On the other hand, there was considerable variation in whether new classroom practices were maintained. Schools that achieved greater implementation among staff members, like Neighbortown and Green Hills, could exhibit declines even though the final amount of change was still greater than that of some other schools which had no declines. Not all schools with high implementation, though, experienced declines (e.g., Smalltown Middle, Smalltown Elementary, and Southend), and not all less ambitious schools were able to maintain the few changes they made (e.g., Riverside and Farmcenter). Thus, declines were not simply artifacts of having attempted more change. Other factors were important.

This section discusses how the availability of incentives, altering rules and procedures, and assessing an innovation's effectiveness contributed to continuation. A second theme is that specific local conditions affect whether these three events for promoting continuation occur. First, local priorities, resource availability, and the interdependence of staff influence the availability of incentives, such as administrative encouragement and peer interaction. Second, the effectiveness of modifying rules and procedures to support new practices is constrained by how tight the bonds are between operational guides and staff. Third, the occurrence of

effectiveness assessments is largely determined by the presence of one or both of the other two events. Additionally, the nature of local priorities can affect how long staff actively support changes made during particular projects. Finally, the turnover of key staff can have severely detrimental effects on continuation.

Incentives in Temporary and Permanent Systems

As discussed in Chapter VI, the RBS planning teams were temporary systems. That is, they possessed organizational properties of their own and were acknowledged as being of limited duration. In many cases, these temporary systems operated very differently from how the schools, or permanent systems, operated. For example, instead of relying on students for most of their human contact in the harried atmosphere of the classroom, teachers were able to discuss professional matters in relatively uninterrupted settings; instead of individually making decisions about a single classroom, they jointly made plans for the entire school; and instead of having few, if any, adult sources of feedback and encouragement, they worked in a supportive environment with frequent commendations from peers, outside experts, and school administrators.

These temporary systems were still in operation when the first implementation efforts were made. As a result, teachers received a steady stream of queries about how the new activities were going, both from other staff and researchers. They also had occasion to share their project experiences at in-service meetings, at special conferences arranged by RBS, and with outsiders who had heard of the new programs. This first flush of implementation was a heady experience for many of the participants.

It should not be surprising, therefore, that the most critical factor in the extent to which new classroom practices were maintained once the temporary systems dissolved was the availability of incentives, or "any prospective source of gratification" (Sieber, 1981: 118). Because teachers typically work in isolated settings with very few rewards (Lortie, 1975), switching the arena of action from a temporary system to a permanent one can be traumatic for the continuation of change. Such was the case in the RBS schools. Where incentives, positive or negative, were available to staff to maintain changes, new practices on the whole continued; where there were no such incentives, the amount of change declined.

There were three major potential sources of incentives for maintaining classroom-level change: administrators, other teachers, and students. By far, the most dominant of these was the building administrator. Teacher-to-teacher interaction was not frequent enough to be very effective in encouraging innovative behavior to be maintained. Students seemed to encourage or discourage more general aspects of a teacher's style than specific project-related activities. This, of course, does not discount the salience of these two sources for maintaining other kinds of teacher behavior.

Administrators as a source of incentives. Smalltown Elementary, Smalltown Middle, Southend, and Oldtown all had at least one administrator in the building who showed a keen interest and played an active part in making sure that changes continued. In the first three schools, the administrators not only conveyed this interest in conversations with faculty but also included on formal evaluations their observations about staff progress toward system goals the projects addressed. At Smalltown

Middle such evaluations were used only in the English department (whose staff had received formal training). In the other two schools, however, non-project teachers were held just as accountable for making progress toward project goals as participants. Non-project teachers were given project-related materials and, not surprisingly, made considerable use of them. As one administrator said, "(By using evaluations) I may have put some of them in the position where they had to do something." Thus, the administrators coupled positive incentives (recognition for using new practices) with negative ones (the threat of low evaluations for non-use) to effectively induce both project and non-project staff to maintain the new practices. An Oldtown administrator used more informal and positive incentives to support project changes, and only with project participants.

Post-implementation administrative incentives were noticeably absent at Neighbortown, Farmcenter, Middleburg, and Green Hills. The Neighbortown principal, although professing a strong commitment to the project, believed that teachers preferred to be left alone to do their work and, so, did not often discuss changes with the staff. The teachers, on the other hand, noted that if someone had bothered to ask them occasionally how "things were going," they probably would have continued many of the activities. One teacher stated that since the activities required some additional work and there was no recognition or mandate to encourage change, "I stuck with what was comfortable for me."

Several staff at Farmcenter referred to their principal as a "joiner" because each year the school seemed to take up a new project. Indeed, the year after implementation of the RBS project, staff in-service time shifted to an entirely unrelated activity. Staff interpreted this to mean that the

RBS project was no longer a priority and subsequently discontinued new project-related classroom practices. At Middleburg, the principal also replaced the RBS project with another one, and with similar results. At Green Hills, the principal who had initiated the RBS project was transferred. The new principal continued project-related planning (without RBS assistance at the principal's insistence) but did so without consulting or involving the original RBS participants. Subsequently, several project teachers reported waning enthusiasm for continuing their changes.

The question arises as to why some building administrators continued to support changes actively while others did not. Certainly the answer is a complex combination of factors, but the data from this study suggest that adminstrators were not all that different from teachers. When incentives were available to them to promote the changes, they did; when such incentives were not available, they did not.

For example, in the two Smalltown schools and Southend, all of which were in the same district, the projects tackled what the superintendent felt was the district's most pressing issue: improving basic skills achievement. The central office closely followed the schools' progress toward attaining this goal. Not coincidentally, administrators made special efforts to promote the changes developed in the RBS projects.

At Oldtown, just when the administrator who coordinated the RBS project decided that more pressing issues would have to take precedence over the RBS work, the SEA announced regulations governing career education graduation requirements. Project-related changes provided the simplest way for the entire school to meet these requirements. As a result, the

district directed the school to pursue the approach with all faculty and the administrator reallocated time accordingly.

The new principal at Green Hills had little interest in continuing RBS project activities and, in fact, dismissed RBS from assisting the school. However, the principal did devote considerable staff time to related activities because of the district's commitment to the school board to develop a program in the area.

At both Bigtown and Patriot, the RBS approach was targeted for district-wide adoption. Although this development did not insure implementation, by the end of the study it was evident that building administrators were planning to spend much of their time supporting this initiative.

Administrators at the other schools were not nearly as active in encouraging change after formal activities ended. This does not necessarily reflect administrative shortcomings, however. Instead, in the majority of the schools, it highlights the typical relationship that existed between building administrators and teachers. For the most part, teachers were left alone to perform their duties; administrators' time was consumed by budgeting, scheduling, and putting out daily fires. Thus, teachers and administrators rarely discussed instruction, unless there was an additional pressure that encouraged or compelled them to do so. Such an external stimulus was not present in schools where administrative incentives to teachers were few.

At Neighbortown, for instance, a district official actually reduced project resources, even though this person had actively and ardently participated in formal planning activities. The administrator explained that with tight money and the relatively low priority of career education, the

high level of support necessary for the project could no longer be justified. "We shot a mouse with an elephant gun," the official acknowledged. The principal, in turn, adopted a wait-and-see attitude about the project and, as teachers saw it, all of this meant that administrators had lost interest in the project. In this case the salience of the RBS project in furthering district goals affected the allocation of resources to support change. This affected the building administrator's efforts to encourage change which, then, influenced teachers' retention of new practices.

Teachers as a source of incentives for maintaining new practices. A second potential source of encouragement was other teachers. However, observations and teacher reports indicated that the majority of teachers did not effectively communicate knowledge about or encourage new practices. For example, 569 of 661 teachers surveyed said they felt free to call on other teachers to help solve a problem; yet, only 108 said they visited other teachers' classrooms. This suggests that while teachers were comfortable with their colleagues, they rarely had any kind of intensive interactions about specific practices.

Nevertheless, there were pockets within schools where teachers' work was more integrated (Corbett, 1982a). In these grades or departments, there was typically greater interaction among teachers. They frequently planned and evaluated classroom activities jointly and had more opportunities to observe each other in action. This collaboration sparked a continuous flow of information and provided numerous opportunities for one to receive positive incentives (professional recognition from peers) for specific practices. In such subunits containing a project participant, it was not uncommon for project-related changes to be not only discussed but also

implemented by most of the other teachers. Subsequent interviews revealed that changes made in this way were also typically maintained long after implementation. When changes in the subunits were discontinued, the reason was attributed to lack of effectiveness rather than lack of encouragement.

At Smalltown Elementary and Southend, tightly knit subunits not only reinforced administrative incentives but also effectively and quickly induced new teachers in the group to adopt similar changes. In schools where administrative encouragement was missing, such subunits were the only source of adult recognition and, through group commitment to the innovation, enabled change to be kept alive. For example, a Neighbortown department of five people jointly planned courses, frequently taught the same courses, and evaluated the effectiveness of course activities together. Changes by one teacher usually affected the others and were not made without the advice and consent of the group. Once such a change was agreed upon, it was made by the entire group or by those whose responsibilities the change affected.

However, this kind of collaborative activity was rare; out of the 14 schools studied, field work uncovered only 10 departments, grade levels, or teams structured in this way. Generally teachers who did not have supportive administrators suffered a considerable loss of attention at the conclusion of formal activities. The continuation of change suffered as a result.

Students as a source of incentives for innovative practices. Because teachers spend so much time working in isolation, students become important to them as sources of incentives (Lortie, 1975). However, only three or four project participants reported that students had been especially

effusive about specific new practices. Most students seemed to respond to more general aspects of a teacher's style than to day-to-day classroom activities. As a result, although students may be the primary source of feedback which determines how much satisfaction teachers derive from their work, students do not provide major incentives for specific new practices.

Changing Rules and Procedures: Curriculum Revision and Continuation

An effective alternative to using incentives to facilitate the continuation of new practices is revising rules and procedures. An illustration of how this worked in the RBS projects involved changing the written curriculum. Altering curricula was particularly effective for change involving specific instructional activities. These activities required rearrangements of the use of class time. As a result, either some existing activities had to be eliminated or shoe-horned into less time. Teachers in several subunits were willing to make temporary adjustments for initial implementation but argued that they could not do so on a regular basis without corresponding changes in the curriculum. In effect, old core practices had to be replaced by new ones. If the innovative practices remained as add-on activities, they would quickly become neglected.

Incorporating new practices into curriculum guides was not unilaterally effective, however, because of differences in the bonds between teachers and the curriculum across schools and across subunits within schools. For example, at Oldtown, teachers were required to put into writing activities they used to help students meet state graduation requirements. Teachers reported there was a generally blase attitude about covering district curricula among staff; but, SEA requirements were more

compelling because teachers would be directly accountable for carrying out what they wrote. Happily for the RBS effort, project-related changes offered a ready-made solution for meeting one portion of the requirements.

Commitments to adhering to the curriculum were also present in the English department at Green Hills, and the social studies departments at both Neighbortown and Suburban. In each case, formal changes in required content and activities helped insure that changes would continue.

The curriculum had a strong, although more indirect, effect on new practices at Patriot, Smalltown Elementary, Smalltown Middle, and Southend. At these sites, the curriculum emphasized student outcomes in basic skills, and student progress was closely monitored at both the school and district level. This attention to basic skills helped maintain practices intended to promote student achievement, such as those devised in the RBS projects.

Making changes in subunits or schools where curriculum guides closely governed behavior had an additional advantage: It helped soften the effects of staff turnover. At schools where teachers were largely responsible for determining what happened in the classroom, there was no assurance that someone succeeding a project participant would continue the changes. For example, when the project coordinator at Riverside was transferred to another school, Riverside lost its major project advocate. Interestingly, turnover at this school was so high that two years later only two staff members and two students could be located who even recalled the names of RBS field agents. On the other hand, new teachers in social studies at Neighbortown and on one of the teaching teams at Smalltown Elementary almost unwittingly implemented project changes as they followed the subunits' curriculum guides.

A further advantage of incorporating changes into curriculum guides is that it made the nature of a course less dependent on the individual who happened to be teaching it. For example, a course outline prepared by the project's math representative at Neighbortown was later used by another teacher who took over the course. This second teacher had expressed no interest in the project and yet, because of unfamiliarity with the course's content, actually made as many changes as project participants.

However, close linkage between what teachers taught and what the curriculum prescribed was the exception rather than the rule. In only four of the 14 schools did teachers show a strong bond with the curriculum. At Oldtown, the bond was tight only where the curriculum was reinforced by state graduation requirements. Few subunits in schools with looser bonds demonstrated a strong commitment to their curriculum. In the remaining schools and subunits, teachers exercised great flexibility in what they chose to teach. Moreover, when it became apparent that curriculum revisions could effectively promote the continuation of new practices, the people who were in the best position to instigate such revisions were often not members of the planning team or, worse, were vocal critics of the project.

Assessments of Effectiveness and Maintaining New Practices

Participants in each of the projects initially intended for new practices to continue once implemented. Even in schools that adopted and discarded projects with alarming speed, participants expressed hope that somehow the RBS project would enjoy a different fate. Ideally, the sole deterrent to a practice's continuation would be demonstrated

ineffectiveness in achieving a desired goal. Yet, in most of the 14 schools and their constituent subunits, there were few examples of changes being tried out long enough to make an assessment about their effectiveness possible.

There were three instances where teachers did assess new practices. In each case, they relied on students' immediate responses as indicators of effectiveness. At Smalltown Elementary, teachers in one team used student performance on teacher-made tests to determine if their new instructional strategies had been effective. A teacher at Neighbortown and several teachers at Patriot relied on overt student behavior as a measure of effectiveness. In the former school, the teacher ended up keeping a practice that had been slated for abandonment; in the latter school, teachers discarded a practice they were inclined to preserve.

Test data at Patriot and Southend, as well as administrators' more informal perceptions, indicated that student achievement was improving. The district credited the RBS projects for the increase and, thus, continued them. This kind of assessment helped stabilize specific new practices more indirectly than did teacher assessments, chiefly by directing administrators' attention to project-related changes.

Typically, though, assessments did not occur. Projects simply came and went too frequently for any specific intervention to be measured, either objectively or subjectively. Moreover, objective data could not be matched with specific practices and, thus, their effectiveness could not be clearly determined. Thus, on the whole, potentially beneficial practices suffered the same fate as less useful practices (and vice-versa), unless

alternative sources of incentives were available or new practices had been incorporated into curriculum guidelines.

Critical Post-Implementation Events and School Contextual Conditions

The previous section points to three post-implementation events and one school context characteristic that had direct effects on whether or not teachers maintained new classroom practices. The three post-implementation events were: (1) the provision of administrative and peer incentives, (2) incorporation of practices into the curriculum, and (3) assessments of the effectiveness of the new practices. It should be noted that incorporating changes into the curriculum had a positive effect on continuation only where the existing bonds between teachers and the curriculum were tight. The one school context factor that directly affected continuation was staff turnover. Obviously, when project participants left a school, the overall number of teachers using new practices dropped. This tendency was mediated, however, in well-integrated subunits where the practices had been made part of the curriculum. In other words, the greater the incorporation of new practices into the curriculum, the less negative the effect of staff turnover on continuation.

These findings make a critical contribution to understanding how school change projects succeed and fail. Specifically, they identify local school conditions which are necessary for post-implementation events to occur. It is not enough to know that the events are necessary to promote continuation; understanding the conditions under which the events occur is just as imperative. It is useful to review these three post-implementation

events in light of contextual conditions that supported or hampered their occurrence.

First, two conditions largely determined whether or not administrators provided incentives for teachers to continue new practices. These were the availability of resources to support the RBS project and the nature of teacher/administrator interactions about instruction. Additionally, the availability of resources tended to increase the frequency of these interactions, thereby having both direct and indirect effects on continuation. Resource availability itself was further contingent upon the salience of project activities for meeting district goals (or for complying with state requirements).

Whether or not other teachers provided incentives for continuing new practices hinged primarily on the organizational structure of subunits. Where a teacher's work was well-integrated with that of others, incentives (in the form of encouragement and approval) for specific practices were generally provided; where teachers were more isolated and autonomous, such incentives were not available. Although staff turnover involving project participants reduced the availability of peer incentives, the magnitude of this loss was cushioned in subunits with close bonds among teachers.

Second, school conditions were not as important in determining whether new practices were incorporated into the curriculum as they were in determining whether such incorporation promoted continuation. A positive effect resulted only when there was a close linkage between teachers and the curriculum.

Third, assessments of effectiveness had a better chance of occurring in schools that had a lower adoption rate of new projects. In schools

where principals were labeled as "joiners," projects came and went with such frequency that no single one was used long enough for its effectiveness to be determined. New projects had longevity when they were clearly salient means for attaining district goals.

Generally, this chapter highlights system linkage as a major factor affecting change project outcomes. Close bonds among teachers and between teachers and administrators increase the probability that incentives for new practices will be available; close bonds between formal curricula and classroom practices heighten the effectiveness of altering curricula. Thus, continuation of new practices is facilitated best in schools where such linkages are present.

What to do About What Happens When the Field Agent is Gone

As Glaser (1981) found, and as the preceding findings have shown, for changes to last long enough to become a part of everyday routine, there has to be someone in the school offering encouragement, approval, or the possibility of negative sanctions. Altering rules and procedures can be a useful tool, and demonstrating the effectiveness of a particular practice also can be compelling. But, the former is successful only where rules and procedures actually govern behavior, which is infrequent in schools and their subunits. The latter is even more rare because without available incentives or complementary rules and procedures, the new practices do not last long enough to be evaluated. Thus, the provision of incentives is the post-implementation event most likely to occur.

On one hand, these findings suggest that the prospect of increasing the lifespan of innovative practices is dim; yet, on the other, they

indicate that although promoting lasting change may be difficult, it is not impossible. How? Consider the following four recommendations:

- Maintain at least a low level of involvement beyond implementation;
- Keep the temporary system in place until formal assessments can be conducted;
- Tailor the field agent role to complement that of administrators;
- Try to get changes embodied in operating policy.

First, field agents may want to rethink the appropriate time to withdraw from a site. Because the field agent is typically the only person whose responsibilities specifically concern facilitating change, the field agent should be ready to assist the school beyond implementation. This assures that there is at least one person at a site to pat staff on the back.

Related to this, a field agent cannot assume that schools themselves will evaluate new practices. In fact, they most likely will not unless incentives to promote new practices are available in the interim between implementation and evaluation, primarily because the new practices to be assessed will have disappeared. To combat this, a field agent could persuade the school to keep the temporary system in operation longer, at least until assessments can occur. Not only would this allow more time to plan appropriate assessments, but also meetings themselves would become a vehicle for providing incentives and demonstrating that the project remains a school priority.

Third, by now it is clear that administrators are valuable sources of incentives for teachers implementing new practices. But, it is also clear

that administrators provide incentives only when they already have a history of regularly discussing instruction with teachers or receive incentives to do so. Field agents should assess both of these conditions early on to get a fix on how supportive an administrator is likely to be when formal project activities end. Depending on the results, the field agent can plan to stay on site longer, work hard to get the central office and/or community groups behind the change, or feel comfortable that new practices will continue to be supported after the agent leaves.

Finally, just as altering curricula can spread new practices throughout a faculty, they can also help maintain those practices. Of course, such changes are not unilaterally effective; they are useful only where bonds between policy and practice already exist. If schools in general resemble the 14 schools in this study, there are going to be some close linkages of this type in most of them. In these situations, then, reliance on the heroic efforts of an individual to champion change can be reduced by instituting policies that foster new practices.

CHAPTER VIII

Mapping Local Conditions Through the Life of Change Projects

The preceding pages have taken the reader on a journey through field agents' and school staff's experiences in 14 change projects. Along the way, the intrusions (for better or worse) of local school conditions into the change process and their effects on change outcomes were singled out. In a sense, school conditions were a maze for field agents. At different times, various conditions would emerge as unexpected barriers or aids. For example, early on in the projects, when field agents assisted small cadres of planners, the degree of interdependence among teachers was of little concern. Interdependence became keenly salient, however, as the focus shifted to making changes throughout a school. Conversely, antipathy between various school factions greeted field agents from the outset of planning and remained a constant companion up to implementation. But from that point on, the importance of this school condition faded.

This chapter maps the interplay between local conditions and the projects. It explicates a little more clearly the conceptual approach presented back in Figure 1 (Chapter I) by highlighting eight local conditions as they emerged, disappeared, and re-emerged over time. The first section of this chapter presents a longitudinal view of each of the conditions. The second section addresses the implications of this view for field agents. Finally, there is a note on the uniqueness and commonalities of school change projects.

Local Conditions During the Projects

Figure 4 summarizes the impact of local conditions on various project elements. These elements correspond to the topics addressed in Chapters III through VII: field agent activities, sequential planning, local participation, implementation, and continuation. Moving through Figure 4 from left to right, one gets a sense of how different conditions intervened in projects over time. Field agent activities, planning, and participation are major issues typically associated with the first phase of the change process, initiation. Implementation and continuation are the second and third phases. One should keep in mind, however, that change projects cannot be so easily and clearly separated into distinct linear segments; the phases overlap and frequently are gnarled (Fullan, 1982).

Two more comments about Figure 4 are warranted. First, heavy black lines in the chart indicate points at which a condition's influence was particularly powerful. Dotted lines indicate where the condition's importance was minor relative to other conditions. They do not necessarily represent the absence of effects. Second, a quick glance at the figure suggests that the initiation and continuation phases were especially sensitive to local conditions, and that the implementation phase was less so. This is due, in part, to concentrating solely on how linkages affect the quantity of implementation. Additionally, many of the school conditions generally referred to as barriers to implementation actually appear and need to be resolved during initiation, despite Herriott and Gross' (1979) contention that many of these barriers are unknowable during planning. In this study, barriers prevented a project from reaching implementation. Once this phase was

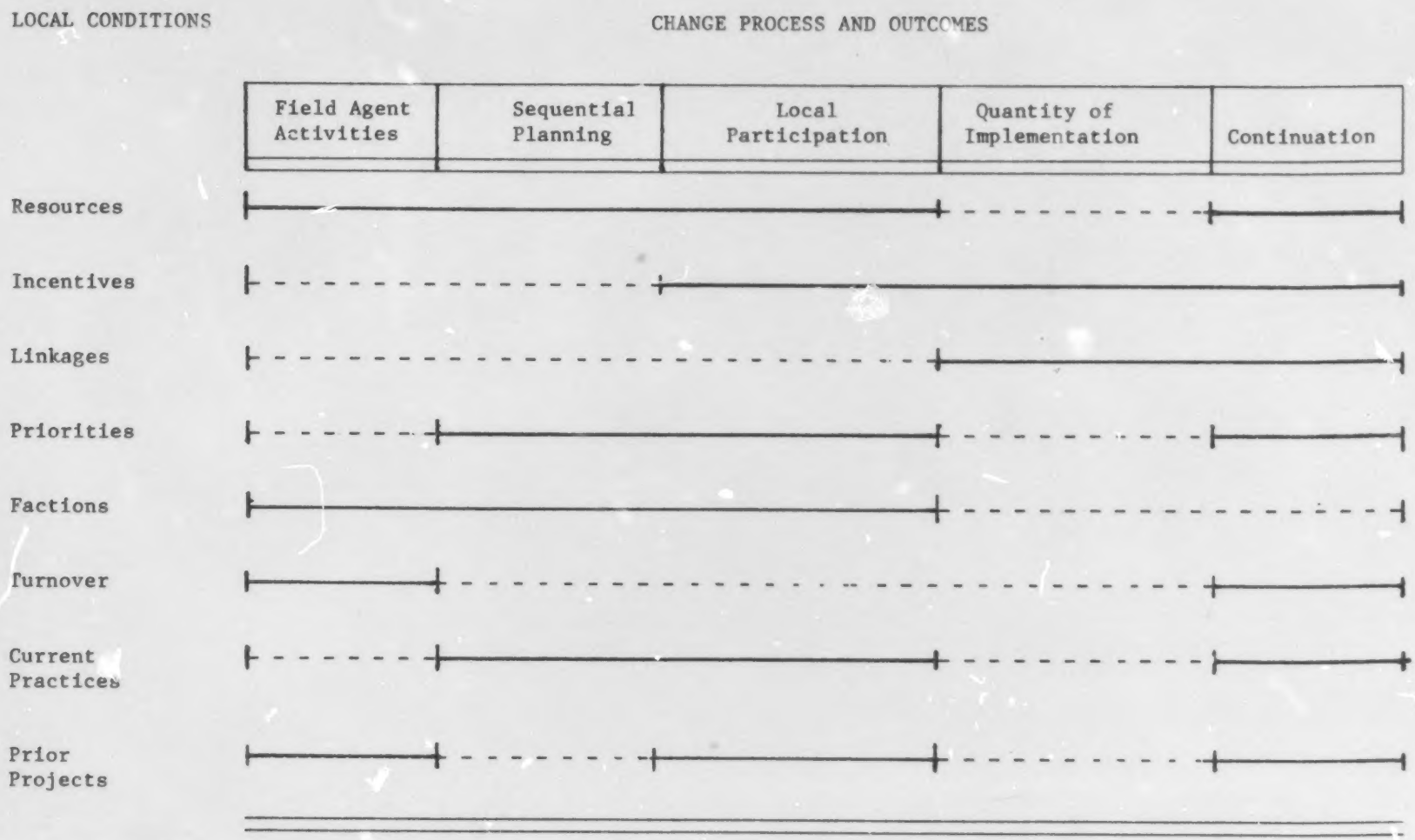

Figure 4. Local Conditions' Importance Throughout the Life of the RBS Projects

reached, few local conditions intervened. However, implementing new classroom practices covers a relatively short period of time. The issue quickly becomes whether to continue changes, and during this phase a complex set of local conditions reappear.

The Availability of Resources

The most critical resource, and the one in consistent need throughout the projects, was local staff time. From the outset, administrators lacked the time to be trained to lead the projects and to attend meetings. This greatly increased field agents' leadership responsibilities. Additionally, constraints on staff time in general led to (1) delays and alterations in the sequence of planning activities and (2) reductions in the amount of local participation. Later, limited time for administrators to talk with teachers about their instructional changes and to offer verbal encouragement had negative effects on the number of teachers who continued to use new practices.

Incentives and Disincentives for Innovative Behavior

Local staff behavior in the projects was influenced by a kaleidoscopic array of incentives and disincentives. Just as the childhood toy shows a different pattern with each twist, the balance of factors encouraging and discouraging participants changed as staff perceptions of priorities changed. For example, initially project meeting discussions served as incentives to participate. However, as teachers began to worry about potentially negative consequences that absences to attend meetings had on student learning, time spent in planning became a cost rather than a benefit. Interestingly, though, as projects shifted from planning tables to

classrooms, verbal interaction with others once again became a highly prized reward. Participant behavior was not easily traced to any one incentive or disincentive. More often, a tug-of-war existed between incentives such as peer interaction, improved student learning, and favorable evaluations from administrators and disincentives like strained relations with non-participants and negative short-term effects on students caused by frequent substitutes.

School Organizational Linkages

The interdependence of staff work activities emerged as the most important influence on the number of teachers who eventually implemented new classroom practices. Where staff interacted often about instruction, changes tended to spread beyond project participants. Where teachers tended to work in isolation and where principals were aloof from instructional activities, changes remained within the boundaries of the planning teams. Regular and frequent interaction also promoted continuation. No special efforts were needed to get teachers and/or administrators together; day-to-day school life provided ample opportunities to offer encouragement and conduct evaluations. An additional element of school structure bearing upon both implementation and continuation was the extent to which teachers were bound to curriculum guides. If strong bonds existed, changes were hard to initiate but, once made, they stimulated non-participants to implement project-related changes and facilitated continuation among both participants and non-participants. As a final note, frequent interaction and adherence to curriculum guides varied as much within schools as across them.

School Priorities

When project objectives matched high ranking school priorities planning proceeded relatively smoothly; participants willingly devoted time and effort to activities; resources remained available after formal activities ended; and new projects rarely shoved the RBS efforts aside before their benefits could be evaluated. When project objectives ranked further down the list of school priorities, just the opposite was likely to occur. Occasionally a project's priority increased because of the serendipitous issuance of a new SEA regulation or the sudden availability of funds for improvements in its content area. Where project objectives ranked in the school was the key. All of the 14 schools named these objectives as a priority. The problem was that inadequate resources prevented the schools from addressing more than their top one or two priorities at any one time.

Faculty Factions

Antipathy between teachers and administrators and among teachers played an important part in determining the course projects took before reaching implementation. Field agents occasionally found themselves having to mediate interpersonal tensions that surfaced during project activities, even though the roots of the conflict typically resided in non-project events. Most often in such cases the field agent served as a go-between for teachers and administrators. The projects themselves also had a hand in stimulating tensions among teachers. While some participants attended planning meetings, non-participants often proctored their classes. To several non-participants this was an unnecessary infringement on their already scarce free time. Before long, they began to resent the apparent privileges being

accorded to those in the project. One of the effects of this was that participants expressed some reluctance to devote as much time to planning activities as they had previously.

Turnover in Key Administrative and Teacher Positions

Turnover of key participants in the projects or of superintendents did not occur frequently. But, when it did occur, it produced severe problems. For field agents, the resignations of a supportive superintendent or principal was a big stumbling block. In the two cases where this happened, projects were left hanging while the field agents renegotiated their continuation. Where turnover in the superintendency occurred, lengthy discussions yielded new endorsements; where the new principal took over, the school's relationship with RBS ended. Turnover among teacher participants was more frequent but generally less disruptive, unless the teacher who left also happened to be the project's main advocate. At the school where this happened, the teacher's leaving doomed project-related efforts.

Current Decision-Making, Instructional, and Administrative Practices

A school's instructional and administrative practices are well-ingrained. Therefore, it was not surprising that when formal project activities ended, some teachers returned to older and more familiar classroom practices. Several administrators, too, reverted to their normal patterns of rarely conversing with teachers about instruction--in the absence of continued incentives to do otherwise. Somewhat more unexpected, though, was participants' tenacity in retaining their accustomed ways of making classroom decisions. Teachers, in particular, relied on common, or ordinary, knowledge for determining how to instruct students. The projects, on the

other hand, included long and, occasionally, tedious procedures for systematically collecting data to build a more scientific knowledge base to guide teachers' decisions. Although teachers faithfully engaged in these activities, they generally followed their more subjective intuitions when selecting which new practices were most likely to improve their classrooms.

Prior Change Projects

All of the schools were familiar with change projects (some more so than others, of course). These past efforts seemed to leave a legacy that did not always facilitate RBS activities. Previous unsuccessful attempts to improve the schools soured staff about the prospects of the RBS projects, so much so that in one school staff never really agreed that the project was worth starting. Such legacies meant that field agents were met by participants skeptical about the project, its potential effectiveness, and the field agents. It was also in schools which had a history of initiating new efforts before old ones had reached fruition that RBS changes rarely received a long enough trial for their effectiveness to be determined.

Implications for Field Agents

Specific suggestions for either countering or taking advantage of local school conditions are presented at the ends of Chapters III through VII and need not be repeated here. Instead this section takes a little more global look at field agents as they help initiate, implement, and continue change projects.

Initiation

The initiation phase of a change project draws a lot of attention--from researchers, developers, and field agents. Certainly this is justifiable. It is hard to discount the importance of getting a project off on the right foot and the compelling logic of the argument that quality planning leads to effective changes. This study provides another reason for concern about how this phase proceeds: sensitivity of project initiation to local conditions. In the 14 schools studied, all conditions except the interdependence of staff work activities affected the nature of planning, the forms of local participation, and attendant field agent activities.

For the field agent, the early part of a project is a balancing act. The agent must maximize the benefits of the project while minimizing its costs. At the outset, optimal benefits are sought through general change activities that many people consider effective: systematic planning procedures, local participation, and activities normally associated with the field agent role like finding resources, process helping, and suggesting alternative solutions to problems. These activities quickly interact with the particular mix of local conditions at a school. And just as quickly, those features intended to yield maximum benefits can become costs which dampen a local staff's willingness to participate. The field agent, then, must attempt to readjust the scales to favor benefits.

In the RBS projects, maximizing benefits entailed altering the sequence and/or requirements of planning activities and reducing demands on participants' time. This reiterates the importance of mutual adaptation as a precursor to successful change (Berman & McLaughlin, 1976). This concept, however, applies not only to the pull and push of fitting externally

developed innovations to a school but also to altering the procedures by which change decisions are informed and made.

During initiation, the field agents cannot allow wrestling with alligators to blur the fact that the original objective was to drain the swamp. An eye must be kept on implementation. Despite the fact that the most critical condition affecting implementation, staff interdependence, does not seriously affect planning and participation, it must be considered when participants are originally selected. There are two important reasons. First, participants' location within the school affects whether non-participants also tend to make changes. Second, participants may start making changes before implementation is formally begun. Waiting until later in the project to worry about linkages between participants and non-participants would likely miss the actual beginning of the implementation phase.

Implementation

The lack of (1) horizontal linkages among teachers' work activities and (2) vertical linkages between administrators and teachers and between curriculum guides and instruction is the major obstacle to widespread implementation of new practices in schools. Many other obstacles confront a project to be sure. For example, resources must be found, the residue of previous efforts shaken off, and faculty factions finessed. But, once the issue becomes who is or is not going to change, knowing how individuals and guides for behavior interrelate can yield the best prediction. This is because such knowledge provides insights into who will know about and receive encouragement to change.

Linkages are important in both the temporary systems initially established to promote change and the overall social system of the school. Close linkages are essential to the success of whatever temporary system is used. Frequent discussions, jointly-shared task responsibilities, and an agreed-to goal bind participants to one another. Thus, over time, participants develop group, as opposed to individual, commitment. Such commitment should ultimately stimulate most participants to change. This phenomenon was clearly evident in the RBS projects. Linkages in temporary systems, however, vary among different methods of providing assistance to a school. They tend to be present in planning groups and absent in typical one-day in-service settings. Thus, the way in which the activities of initial participants are structured predetermines, to a great extent, the number of individuals likely to change.

Similarly, the presence or absence of linkages in a school as a whole substantially affects who beyond initial participants will change. If participants are in departments or grades where teachers frequently work together and/or closely adhere to curriculum guides, new practices will certainly become known and more than likely be given a trial. Of course, whether such linkages are strictly horizontal among teachers, vertical between teachers and guides, or both implies the necessity of adopting slightly different assistance strategies. Vertical bonds between administrators and teachers are critical. Administrative mandates or attention to new practices in evaluation procedures seem not to bludgeon teachers to change so much as they indicate that an innovation is worthy, important, and favorably regarded.

There is a drawback to this line of argument. If the price for achieving widespread change is the creation of tightly organized, closely supervised institutions, then maybe the cost is too high. What are the morale consequences of severely reducing individual autonomy? This issue, in fact, may be less problematic than it is sometimes considered to be. Tighter linkages simply mean that teachers have opportunities to discuss instruction with one another, that what sixth graders learn in one classroom is similar to what other sixth graders learn in another classroom, and that principals are aware of what constitutes state-of-the-art practice and have means to assess its prevalence. In other words, tighter linkages enable a school to be structurally receptive to new knowledge and supportive of the widespread use of currently acceptable practices. Field agents will rarely be in a position to restructure a school; but given their concern with altering practice, they can take advantage of those situations that facilitate the spread and use of new knowledge.

Continuation

Continuation issues have not been heavily addressed by researchers, developers, or field agents. However, this phase encounters as complex a mix of local conditions as initiation. Scarce resources to encourage special attention to new practices, the initiation of other new projects, changing priorities, and staff turnover all endanger newly implemented changes. Without means for countering these threats, changes generally do not last long enough for their effectiveness to be determined. This goes a long way toward explaining the mixed results of educational reforms. Attention to maintaining new practices is simply dropped prematurely. Just as

field agents have to navigate a hazardous course during initiation, a similarly booby-trapped path awaits implemented changes.

Field agents, then, may need to rethink the appropriate time to leave a site. The discussion in Chapter VII suggests that schools themselves cannot easily promote continuation. Lasting classroom change is the result of continued encouragement, incorporation of changes into curriculum guides, and effectiveness assessments. For these assessments to occur, one or both of the other two mechanisms must be present; if they are not, changes are unlikely to last long enough for an evaluation to make sense. However, routine encouragement and incorporation rely on the presence of school linkages and, thus, will be effective only in those sporadic situations where close bonds exist. To overcome this, field agents probably should expand the time frame of a project to include follow-up activities after implementation.

Follow-up activities could take several forms, any of which would increase a new practice's chance of survival. First, build evaluation into formal project activities. This would enable peer encouragement to maintain new practices until their actual benefits can be determined. Of course, this strategy will be of most use in maintaining project participants' innovative efforts. Second, schedule some reporting activities in which participants share what they have done with others. Bring outsiders involved in similar projects to the school or work with the school to arrange opportunities for participants to speak at conferences. This strategy has the same drawback as the first in that it will only affect a limited number of innovators. Third, field agents can assist widespread continuation by working with the principal to find ways to build interaction into existing school routines. One way to do this is to identify particular times in the

schedule when the principal can make a point of speaking to one or two teachers about their innovative efforts. Another way to increase interaction is to find spots in teachers' work schedules where they are free to observe and discuss one another's use of new practices. These last activities require significantly fewer resources than the first two and may, in fact, be more effective overall. The point of all three suggestions is that field agents need to do more than assist the birth of an innovation; they must also nurture it to maturation.

A Final Note: To Each Its Own

Willard Waller (1967:34) once described schools as a "museum of virtue." Other authors since then have duly noted that despite intensive reform efforts, the classrooms of today are not very different from those of the past. Indeed, most teachers still instruct rows of restless students, chalk in hand, instilling the wisdom of the ages. This image of schools as the resilient institution encourages adherence to the belief that a school is a school is a school.

Field agents know better. Each school has its own set of challenges which must be met in ways that are uniquely appropriate for that school. This report has attempted to highlight eight local conditions that combine in different ways to give a school its individual identity. Its intent is to help field agents to understand why they can be so successful in one school and so seemingly inept in another. With such an understanding, the prospects of embarking on a new decade characterized not by the failure of reform but by its success should be immeasurably improved.

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APPENDIX A

Description of Research Methods

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Description of Research Methods

The research for this study spanned three school years. During that time the focus and intensity of fieldwork varied considerably. A team of researchers began working in individual sites when the first meetings between RBS staff and school district personnel were held. Researchers attended most project meetings that year but tended not to visit the schools at other times. During the second year, the research team decided that to obtain a better understanding of project events more in-depth investigation was needed. Thus, field visits became more frequent and were concerned with general school operation as well as the projects themselves. Due to limited resources, however, only five sites could be studied in depth. Each researcher was responsible for one or two sites and visited each approximately once or twice a week. In the third year of the study, researchers continued to cover project activities at the five sites but concentrated most of the research effort on interviewing staff in all 14 sites. For all three years, the research team maintained steady interaction with RBS field agents.

The composition of the research team varied over time. During the first year, four researchers conducted most of the site visits. Only one had been trained in field work methods; the others had been drawn from other RBS units. Before the beginning of the second year, the person who had field work training was appointed director of the research unit and hired three trained field researchers--with backgrounds in sociology of education, anthropology, and educational research and evaluation. They conducted all of the field work during the second year. At the beginning of the third

year, one fieldworker left to finish a dissertation; the other two did the remaining field work.

Data Collection

The major intent of the research was to study the influence of local school contextual conditions on the process and outcomes of the change projects. Initially, the research was exploratory. That is, it was to generate hypotheses about the process (Glaser and Strauss, 1967). Research later moved beyond this objective and was able to discipline the ideas. This type of research, it was felt, could be accomplished best through an open-ended research approach that would not restrict data collection to information specified in advance. Consequently, qualitative research procedures were used. The major data collection methods were observation and interviewing. Other sources of data included a questionnaire, demographic data, field agent contact reports, and documents. They will all be described below.

Observation

Researchers attended meetings of project planning teams as well as smaller meetings between RBS field agents and others such as school and district administrators and local project coordinators. Researchers also observed school faculty meetings, informal interaction in public areas of schools (e.g., faculty lounges, dining rooms, hallways, and principals' offices), school board meetings, and teachers' classrooms.

The observations were unstructured; researchers did not limit their observations or field notes to particular behaviors or events. Instead, they attempted to record meetings or other interactions as thoroughly and with as little inference as possible. Initially, researchers focused on

verbal interaction during meetings and attempted to record all remarks verbatim. Obviously that goal was not attainable, but the emphasis remained on capturing conversations and events as closely as possible. As the study progressed, observations became more highly focused. Researchers' knowledge of the settings, the data that had already been collected, and issues they intended to pursue allowed them to select out that information which was most important to record. Observation became less frequent in the final year of the study as the team shifted to conducting interviews with staff at all 14 sites.

Researchers were non-participant observers. They sat with participants at meeting tables and made notes, but did not take part in formal discussions. Although participants knew the researchers and why they were there, they generally did not interact with them during meetings. The relationships among researchers, field agents, and participants were comfortable; they interacted with one another before and after meetings, during other visits to schools, and at RBS. During meetings, field agents and participants sometimes jokingly said to researchers such things as "Did you get that?" (i.e., had they recorded a particular remark) or if a compliment was afforded someone, invariably the target of the exchange turned to the researcher and said, "Make sure you write that down."

Interviewing

Interviewing was the second major source of research information. Over the course of the study, the researchers conducted a great variety of interviews. The people interviewed included program participants, non-participating staff members, school- and district-level administrators, a few

students, and field agents. Some interviews were scheduled in advance; researchers made appointments to meet people at a designated time and place. Other interviews occurred spontaneously as opportunities arose to talk with people in areas of the school where they tended to congregate, before or after project meetings, at RBS, or in transit to and from meetings. Spontaneous interviews were generally conversational in tone and researchers used lines of questioning that seemed non-threatening in the situation or permitted probing into matters discussed previously. Sometimes researchers collected information by eavesdropping; for example, they listened to and later recorded events that occurred as they waited near principals' offices or sat in faculty lounges.

The extent to which the interviews were structured in advance varied. None were "highly structured"--i.e., neither the way in which questions were worded nor the way responses were categorized were specified in advance. However, researchers knew the general kinds of information they intended to collect. During interviews conducted early in the study, researchers obtained background information about each participant; for example, they asked questions about career history, previous experience in similar projects, and motivations for participating. In the second year, interviews were loosely structured as researchers attempted to learn about such issues as the demands placed on participants by the projects, people's reactions to the innovations, school policies and procedures, and interrelationships among school personnel. Staff were interviewed as both subjects and informants. As the study progressed, however, interviews became more focused. Researchers asked questions to pursue particular lines of inquiry generated by interim analyses--e.g., the influence of various structuring mechanisms

on participation or implementation, the incentives and disincentives that affected participants, the influence of various administrative behaviors on projects, and the nature of changes that had been made. The research team compared what data were available from different sites and generated research questions to be answered either through existing field notes or in subsequent interviews. This was particularly important near the end of the study to insure that comparable data would be available across all sites.

Survey

A survey was administered in the first year of the study to all teachers (participants and non-participants) in 13 sites. It was administered one year later in Middletown because the school did not enter the study until that time. The survey asked teachers about such things as their perceptions of the relative importance of specific goals; the degree of influence they had over particular decision areas relative to the principal, central office, and school board; and the existence and enforcement of several types of policies. More detailed information on this survey is contained in Firestone and Herriott (1981a).

Demographic Data

Demographic data were collected from all schools. The data included number of students and staff members, racial composition, reading achievement levels, and rate of enrollment decline.

Field Agent Contact Reports

Some field agents routinely filed "contact reports" with their respective RBS components after each site visit. Researchers requested copies of

some of those reports, especially when they could not be present during a site visit. The contact reports contained such information as objectives of the visit, descriptions of the flow of events, identification of critical issues to be resolved, and the outcomes of the visit.

Documents

Researchers collected a variety of documents during the study. Documents from schools included newspaper articles, curriculum outlines, within-school notices, and program descriptions. RBS documents were primarily project proposals, materials prepared for use in schools, and descriptions of the approaches for developing programs.

Techniques for Ensuring Validity

Researchers used several techniques during the data collection stage to help ensure that data were valid (Dawson, 1982). Basically, they attempted (1) to establish research conditions that were favorable for validity, (2) to continually question the accuracy of data, and (3) to subject their perceptions and interpretations to the scrutiny of others.

Two major research conditions helped improve validity: spending extensive time in sites and establishing favorable relationships with informants. The researchers' extensive presence in five of the schools contributed to validity in several ways. The researchers were able to collect more data to inform their opinions (Greene and David, 1981), to test their interpretations many times in many ways (Becker, 1970), to become sufficiently acquainted with people to interpret their comments accurately (Bruyn, 1966), and to avoid collecting too much data at unrepresentative times (Bogdan and Taylor, 1975). In comparison to 25 other multi-site qualitative studies

surveyed by Herriott and Firestone (1982), this study ranked among those rated "high" in on-site presence.

Researchers continually monitored their relationships with informants, though most relationships were positive from the beginning. Researchers convinced field agents that they were studying the process of change and were not evaluating the agents' work (although this did not always turn out to be the case as published documents were occasionally used by the components to assess their work). Nevertheless, the field agents became comfortable in the researchers' presence, welcomed them to attend even small planning meetings, and confided in them. In some sites, researchers knew that informants' remarks should not get back to certain people (usually administrators) and assured them of confidentiality. Informants learned they could trust the researchers and rarely, to researchers' knowledge, withheld information they thought could be used against them.

Researchers continually questioned the accuracy of data and the credibility of informants. One program participant, for example, seemed to relish giving a researcher the "inside scoop" on matters such as interrelationships among staff members or events surrounding an administrator who was in trouble with central office staff. Although most of that information was later confirmed, none was used until it had been verified. Researchers frequently filed away--often in their heads--information that required independent confirmation.

Intersubjective confirmation of data occurred during the data collection stage when researchers discussed their observations and interpretations with others who knew the settings, primarily research colleagues and field

agents. They offered rival interpretations of the data, sometimes based on their experiences with other sites.

Data Management

Field notes were recorded after each site visit and conversation with a field agent at RBS. Researchers dictated the notes into a tape recorder; secretaries transcribed the notes. A common format was used for all notes so that certain information would consequently be located in the same places in a report. For example, researchers specified at the beginning of the field notes the names of participants and purposes of meetings and usually saved interpretations of events until the end. Interpretations in the body of the report were enclosed in parentheses.

A computerized coding system was used to index the field notes so that they would be readily accessible. Codes indicated whether data referred to RBS, the school, its environment, the change process, or program outcomes. Within each, numerous codes existed to help identify the data more specifically. The codes were then entered into a computer record, so that they could be easily indexed and accessed. The data were later collated on print-outs according to code so that researchers could easily locate all field note references to a particular topic.

Several measures were taken during the data management stage to ensure validity. Field notes were recorded as soon as possible after each site visit. The notes included as much detail as possible. As mentioned previously, researchers attempted to minimize inference. They distinguished between observations and interpretations. Researchers read their field

notes after transcription and before coding. In all, over 3,500 pages of field notes were generated during the three years.

Data Analysis

At an informal level, data analysis was continuous. It began as researchers collected data, recorded field notes, and read them. In doing so, researchers saw patterns and recurring themes. For example, the effects of school resources on participation became apparent as teachers from several schools repeatedly came to project meetings frustrated about leaving their students with substitutes they knew would not provide good instruction or missed meetings because substitutes were not available. The use of ordinary knowledge to make decisions became evident as participants talked about having made classroom changes before data from sequential planning procedures were available.

At a formal level, researchers analyzed data at the end of each year and prepared interim reports of study findings. At the end of the first year, field data were used to answer sets of questions devised by the research team about project events and the schools. Schools were then rated on several variables--e.g., frequency of field agent contact, participant ownership of project, and progress through the planning process. Discussions about these ratings enabled researchers to see more systematic patterns in the data than informal analysis allowed.

At the end of the second year, researchers identified several topics for analysis that seemed to help explain project events. The topics included field agent roles, administrative support for innovation, and

organizational linkages. Individual researchers analyzed the data on one or two topics and wrote interim reports.

During the first stage of analysis for this report, researchers reviewed the field notes from the sites and wrote brief site summaries which described and explained program outcomes. Concurrently, the researchers decided to pursue a major finding that had emerged over time--that local school conditions substantially influenced planning, implementation, and continuation.

The analysis techniques used in this report varied somewhat by chapter. However, analysis always resembled the comparative case study method (Yin, 1981). Researchers started either with an aspect of the change process or an outcome and worked backward to the influence of school context. Patterns of events were first examined by site. Then, efforts were made to locate commonalities across the sites.

For example, in Chapter IV, on sequential planning, prior knowledge of departures from the process served as a starting point for analysis. In one school, teachers identified problems in their classrooms that reduced time on task and made adjustments before that stage of the planning process had been reached; teachers in another school made changes to improve discipline rather than to reduce transition time between activities, even though data indicated the former was less of a problem. Criteria which would indicate that the process had been followed in other sites were then established. Knowledge of the sites, the field notes, and research team discussions identified departures from the process and reasons for their occurrence. These reasons were then categorized. Local conditions were major explanatory

factors. Some conditions coincided with initial explanations in analyses of other issues; others were redefined in light of that analysis.

In Chapter VI, on implementation, analysis started with an assessment of the quantity of implementation. To get an estimate of this, field notes were used to identify the number of teachers who made classroom changes. On the basis of analyses in previous reports, the decision was made to focus on the influence of one condition that seemed the most critical to how widely a school changed: the existence of linkages within schools or departments. Then knowledge of the sites as well as additional information from field notes were used to explain how linkages influenced the spread of change.

During the analyses, researchers prepared various kinds of tables and charts, many of which are included in this report. "Data display charts" (Huberman and Miles, 1982) described each site with respect to particular variables. Other charts contained numbers or ratings. The tables and charts were used primarily to present data in a way that would permit researchers and readers to quickly grasp site-specific or cross-site information, to identify relationships among variables, and to gauge the extent to which particular findings were true for all sites.

Reporting

As indicated in the previous section, reports were written at the end of each year of the study. All reports went through a multiple-stage reviewing process and were revised after each stage; the major purposes of the reviews were to re-examine interpretations and control the quality of reports. Reviewers during the first stage included other members of the research team and other researchers in their organizational unit of RBS.

Second-stage reviewers included other members of RBS, primarily developers, field agents, and administrators. Third-stage reviewers were external to RBS and included members of the study advisory committee.

APPENDIX B

Scoping Out a School

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The premise of this report is that field agents can more effectively provide assistance to schools if they understand the nature and potential influence of local contextual conditions and adjust their strategies or manipulate the conditions accordingly. The intent of this appendix is to suggest to field agents what to look for in schools to assess the potential influence of school conditions and how to look for it.

What to Look For

Field agents need to have up-to-date knowledge of the status of contextual conditions in a particular school. That means they should deliberately seek such knowledge before beginning a project and continually monitor the situation to ensure that the knowledge is current. The remainder of this section suggests the kinds of information field agents can use to identify and understand the conditions discussed in this report. The conditions, obviously, are not exhaustive of all of those that can affect the change process. Field agents should remain alert to other intervening factors as well.

Availability of Resources

The availability of school resources is likely to influence the amount of time that staff members are able and willing to devote to a program. Teachers' schedules often leave little time for them to meet as groups to make plans for educational change. Resources may also be needed to hire substitutes or to pay teachers to attend meetings after school. Field

agents may want to examine the feasibility of other alternatives--enlisting personnel with more flexible schedules (counselors or specialists, for example) as participants or having non-participants cover classes during meetings. Gathering the following types of information should help field agents as they attempt to minimize the influence of resource availability on innovation planning and implementation.

Teachers. To what extent are teachers available to participate in planning? Do they have planning periods or other time that can be used flexibly? Do enough teachers have planning periods in common to arrange meetings then? Are teachers available after school to attend meetings? Do administrators feel comfortable asking teachers to relinquish planning or other "free" time to attend meetings? When do "busy seasons" (reporting and testing periods, major holidays, end-of-year activities) occur?

Other Staff. What employees (e.g., assistant administrators, specialists, counselors) have flexible schedules that allow them to participate with a minimum of disruption to the school? Who is available to handle such details as scheduling meetings, reserving meeting rooms, notifying participants, and providing clerical/typing assistance? Who has or is willing to obtain expertise in the area of the innovation? Are they also willing/able to assist other participants? Are others available to cover participants' classrooms during project meetings?

Administrators. To what extent are administrators willing and able to participate actively, attend meetings, and talk with participants about the project at other times? Does the principal have an assistant to relieve him or her of other duties that might otherwise impinge upon the principal's involvement in the project? Is an administrator available to assume project leadership--if that is wise in a given situation? To what extent is the administrator willing to devote school resources to the project, or does he or she consider other things more important?

Substitute teachers. Is money available to pay substitutes? If not, can it be obtained from other sources? What is the school or district's practice regarding using substitutes to free teachers to do development work? Are substitutes available in sufficient quantity? Do teachers consider them competent? If long meetings are to be held frequently or over a long period of time, can substitutes be contracted and assigned to the same classrooms throughout the project?

Money. Is money also available for other purposes? To purchase materials and equipment? To pay teachers for working on non-school time or during the summer? To purchase refreshments for project meetings? To duplicate project materials? To hire consultants?

Incentives and Disincentives for Involvement

People's perceptions of incentives or disincentives for participating in program planning and implementation may influence their willingness to do so. If incentives are high--if, for example, participants expect to be evaluated more favorably or relish the opportunity to discuss professional matters with peers--they are likely to be more willing to devote scarce time to a program. On the other hand, if disincentives are high--e.g., if participation threatens the quality of instruction students receive--people may be less willing to be involved. Questions that field agents might ask about incentives and disincentives include:

Role in teacher evaluation. Is mere participation likely to lead to a more favorable evaluation or to avoidance of a negative one? For example, are all teachers expected to participate in extra projects? Might implementation influence a teacher's evaluation? Is the innovation such that administrators could use it to evaluate teachers? If so, are they likely to do so?

Other perceived rewards. Will people receive inservice credit or money for participating? Might the project help advance their careers (e.g., through publicity, increased contact with administrators, opportunities to exhibit leadership)? Are resulting changes likely to increase student achievement or motivation? Are some participants especially concerned about or interested in the content of the innovation? Do people value the opportunity for increased professional contact with colleagues, administrators, or outside experts?

Contribution to meeting external requirements. What state or district mandates or expectations can the innovation help participants meet? What school person(s) are most responsible for ensuring that the requirements are met (principal, curriculum coordinator, language arts specialist)? What additional requirements are anticipated in the future?

Detraction from other responsibilities. How does spending time in meetings or implementing an innovation reduce the extent to which participants can meet their other responsibilities? Do they feel they are depriving students by leaving them with a person who is less likely to provide a valuable learning experience? Are people concerned that they will be less likely to cover a particular body of content? Do administrators or teachers fear that the time is not well spent?

Imposition on non-participants. In what ways does the project impose on non-participants? Are they asked to relinquish their time to cover participants' classes or to accept additional students? Are special classes cancelled, leaving more students in classrooms or depriving non-participants of free periods? How extensive are those impositions? How have non-participants reacted to them? How have those reactions influenced participants?

Nature of School Structure

The extent to which work-related activities are interdependent varies widely within as well as between schools. For example, teaching activities may be much more closely coordinated in one department than another; or the content that is taught may be highly specified but not the activities used to teach it. In some schools, a principal's mandate to change may ensure immediate implementation; in others the principal may not be sanguine about teachers' responses to such an issuance. Therefore, field agents and others who want to identify potential influences on change projects, especially how widely changes get implemented, need to be alert to differences within and between schools.

Coordination of teaching. Do teachers plan lessons together, or at least keep one another closely informed about what they are teaching? To what extent does that occur in various grade levels, departments, or other organizational units? Is the school--or portions of it--organized into teams? What teachers plan together informally? When teachers coordinate with one another, what do they coordinate? Content? Methods? Lessons for particular days? Tests? If one teacher wants to make a change, how does he or she arrange it with others?

Formal curricula. What formal curricula exist in the school? What subject areas do they cover? To what extent are teachers expected to follow the curricula? Do they comply with those expectations? How detailed are the curricula? Do they name the specific materials or methods that are to be used? Are teachers able to use content/materials/methods that are not in the curricula? Do they have time to do so? What are the procedures for changing the curricula?

Interaction with administrators. How extensively do teachers talk with school administrators about school concerns? What do they talk about? Under what circumstances--e.g., during informal interaction before or after school, common planning periods, and faculty meetings or only at times of

evaluations? How often do evaluations occur? How are they perceived by teachers?

Agreement about goals and priorities. What evidence exists that certain goals are particularly important at the present time? Does the school have a "mission" that staff members are aware of and to which they agree? What themes echo through inservice sessions, posters, or slogans? What other special projects has the school adopted?

School Priorities

The amount of compatibility between school and project goals and priorities may influence teachers' and administrators' willingness to devote time and other resources to a project. People are more inclined to work on a project that contributes to the achievement of important school goals than one which either does not or detracts from them. Questions in the above section on agreement about goals and priorities can help a field agent identify those which are most important; other questions that will provide information about school goals and priorities include:

Identifying school priorities. What are the major school goals? What is the relative priority of each? What are the perceived major problems of the school? How does the innovation address them?

The match between a project and school priorities. How and why did the school become involved in the project? How does the project address school priorities and problems? If the project addresses goals/problems that are of low priority, has an administrator strongly endorsed it? Has he/she informed staff members that working on it is important--even if it means temporarily neglecting other goals?

Factions

School factions can disrupt the change planning process and make it difficult for people to work together cooperatively. Meeting time may sometimes have to be used to deal with those problems. A project can become identified with one particular group, creating resistance to the changes among opposing groups. Questions that may help field agents understand the factions present in a particular school include:

The nature of school factions. What factions or tensions exist within a school? Is the faculty split into dissenting groups? Do tensions exist between faculty and school administrators? The district offices? The school board? What is the relationship between the teachers' association or union and others? What is the status of the teachers' contract? Are there tensions that involve the community? Students? How did the groups develop? Do they revolve around particular issues?

Factions and projects. Who is aligned with what sides? Who belongs to what factions or cliques? Where do various groups stand in relation to one another? How strong are the tensions? Are they so strong that people even have difficulty participating in meetings together or working together in situations that might be construed as evaluative?

Staff Turnover

The rate of staff turnover in a school can be indicative of a number of possible conditions in school. For example, it can point to uncertainty over what direction a school or district should take, concern over poor working conditions, or even such good working conditions that the district is a stepping stone for more prestigious positions. Regardless, staff turnover that occurs during a project can strongly influence the project. For example, a key advocate for the project may leave the school and create a need for additional advocates. A participant with important responsibilities may leave and create a void. Field agents can learn about staff turnover by looking into the following questions:

The rate of turnover. What proportion of the staff have been at the school for at least three years? Five? Ten? What proportion has spent most of their careers in the building? How long has the principal been there? The superintendent? Where in the school (grade levels, departments) are the relatively new staff members?

Potential turnover effects on a project. At the beginning of a new school year, what participants are no longer at the school? What needs do their absences create? Do their project roles need to be filled by someone else? How important is it to obtain the support of their successors? Who are the new staff members? What expectations do they/others have regarding their participation in the project?

Current Practices

Implementing innovations will require that some participants depart further from their everyday patterns of behavior than others. Some people are so accustomed to behaving in a particular manner that changing it would almost require ignoring their instincts and following procedures in which they have less confidence. Some of the questions a field agent may want to answer in order to learn about a school's current practices are:

Departures from customary practice. What current practices of participants are likely to be influenced by the project and related changes--e.g., teaching methods, decision-making processes, styles of working together? How different are those current practices from what they should be after the change is implemented? How does the magnitude of the differences vary among participants? What difficulties may participants encounter in changing their practices?

The extent to which customary practices are ingrained. Is the project designed to influence behaviors that are very natural to participants, that are an integral part of their everyday actions? That is, does the project affect core practices or peripheral practices, from the participants' perspectives?

Prior Projects

The prior history of innovative projects in a school may influence staff members' attitudes toward new projects or field agents. For example, they may be hesitant to commit time and energy to a project because they suspect that, within a year or two, administrators will discontinue supporting it in favor of something else that comes along. Or, they may be skeptical that outsiders will be able to help them. Questions that field agents might want to ask about prior projects include:

The nature of prior projects. What other projects were attempted during the last 3-5 years? What happened to them? Why?

The legacy of prior projects. Do staff members have a particular attitude toward new projects? For example, do they think the principal adopts a lot of things--to receive favorable attention from the superintendent or community--but does not follow through on them? Do they think that

outsiders are unlikely to understand their situation or to offer suggestions they have not already considered?

Becoming Informed About School Conditions

Obtaining answers to all of the questions suggested in the previous section would, of course, be very time consuming. Field agents need to decide what types of information are most important to collect in a particular situation. They will then need to allocate time to acquiring the information as part of the preparation process that occurs prior to beginning work in a new site. They will probably want to collect some deliberately during the early stages of a project and to remain alert to others later. They will need to use multiple strategies to obtain the information. They might want to interview participants and administrators; listen to people (participants and non-participants) and talk to them informally in school corridors, teachers' lounges, and meeting rooms; use informants; and study various documents.

Interviews can be scheduled with administrators and participants prior to a project; also, field agents can ask about the school during preliminary meetings or working sessions. While some field agents may feel uncomfortable asking a lot of questions because they feel it is a task more appropriate for researchers, school administrators and participants may see the questions as evidence that the field agent is interested in them. Some people seem to be gratified that an outsider who works with many people in many schools is genuinely interested in them. However, field agents will need to avoid asking questions that are threatening and that suggest they are judging people's performances as teachers or administrators. These data collection activities are particularly useful for learning about such things

as school resources, participants' schedules, school problems or goals that are currently especially important, and staff turnover.

Spending time in hallways, teachers' lounges, project meeting rooms, and other "public" spaces of schools such as cafeterias, principals' outer offices, and playgrounds is sometimes a very useful way to learn about a school. A field agent can talk to people informally or eavesdrop on other conversations. Of course, it is necessary to be careful about relaying that information to other people, whether they are internal or external to a school. Also, field agents who spend too much unstructured time in a setting can appear to have little else to do; arriving slightly early for an appointment or a meeting to begin is a way to add legitimacy to this activity.

Cultivating informants who will provide sensitive information that may be difficult to obtain from others--e.g., the existence of interpersonal tensions or controversies that people are hesitant to talk about--can also be useful. Sometimes field agents can acquire data from informants that would take months to get through other means. When using informants, at least two precautions must be taken. First, the field agent must be careful to avoid having other people identify him or her with the informant. Field agents usually do not want to align themselves with any particular individuals or group. Second, field agents should not accept information from informants as true before confirming it independently. People who are eager to provide information may be driven to fabricate it occasionally. Thus, information must be triangulated. For example, during this study a potential informant volunteered information of a "gossipy" nature. During an initial interview, the informant identified a particular clique within the school. Before accepting the information as accurate, the researcher

observed the supposed members of the clique during non-class time (e.g., during lunch or after school) and listened to what others said about them. These sources of information confirmed the initial comment. With this knowledge, the researcher could avoid becoming overly identified with any one faction. To preserve this neutrality, the informant was approached only during interviews that were scheduled as part of a cycle of interviews with all participants or briefly while scheduling the interviews.

Several kinds of documents may contain useful information about school context. Such documents include printed curricula, written rules or procedures, school or district newsletters, and local newspaper articles about the school.

Whatever methods of collecting information are used, field agents should gather information before a project begins and then continually expand and update it. To repeat once again, field agents who are aware of the status of contextual conditions in a particular school can reduce their effects by adjusting their own actions or attempting to alter the conditions. Certainly, field agents always seek to know their clients better; what this appendix has done is to reiterate exactly what information is likely to be most important to have and to suggest some ways to gather it more systematically.